

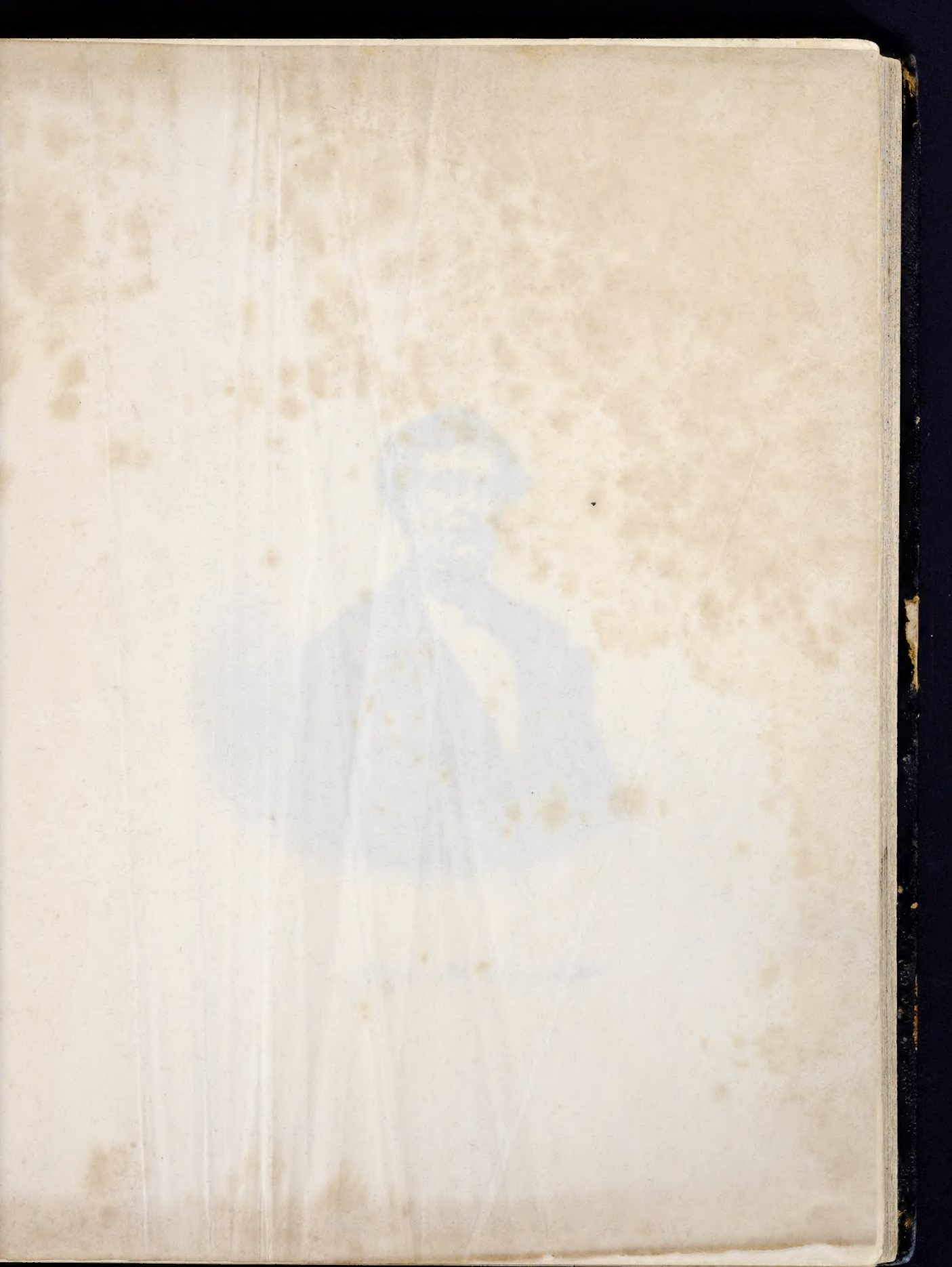
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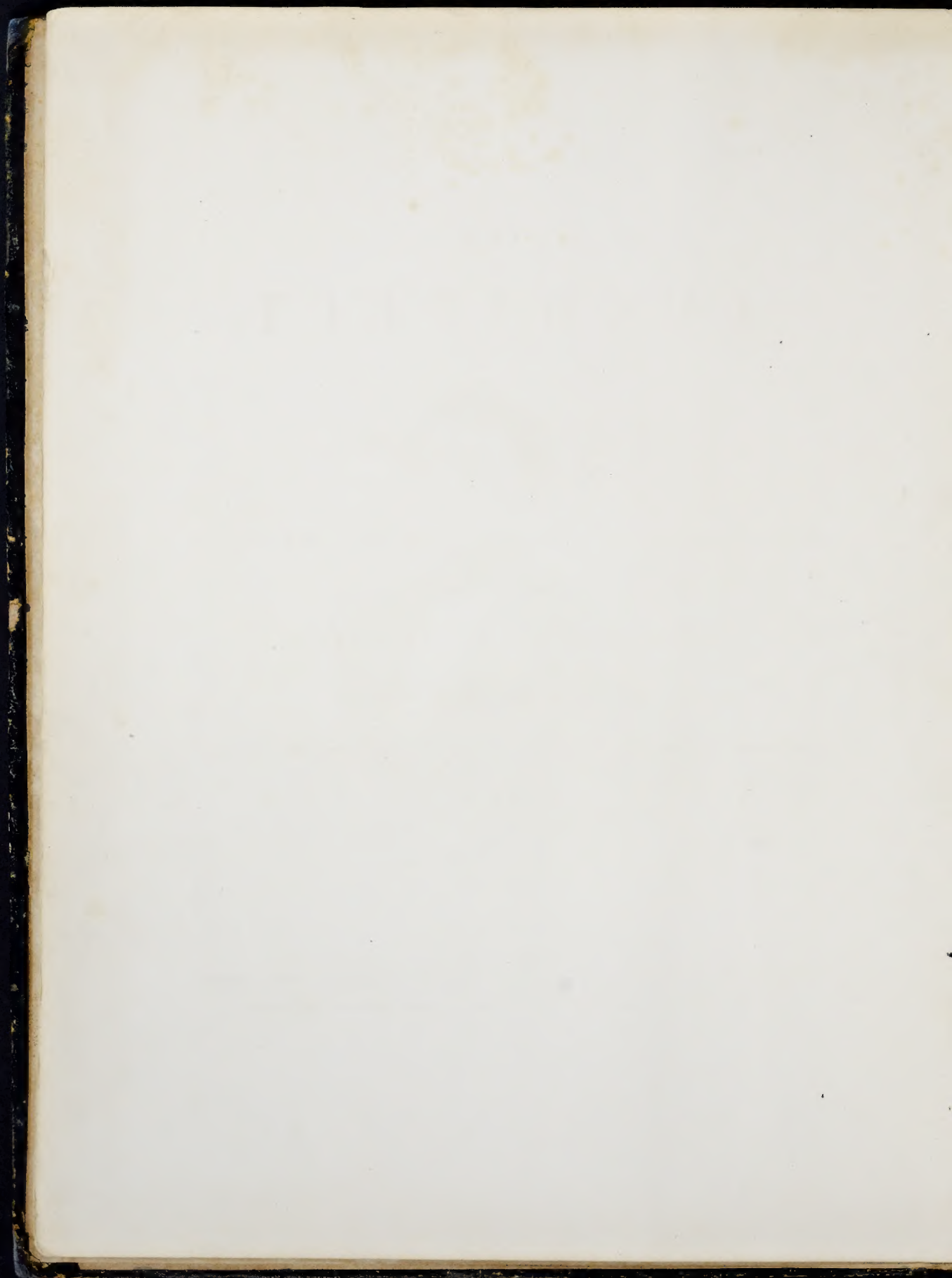
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Mr. A. Marlett



THE
ARCHITECT,

A SERIES OF

ORIGINAL DESIGNS,

FOR

DOMESTIC AND ORNAMENTAL COTTAGES AND VILLAS.

CONNECTED WITH

LANDSCAPE GARDENING,

ADAPTED TO THE UNITED STATES:

ILLUSTRATED BY DRAWINGS OF GROUND PLOTS, PLANS, PERSPECTIVE VIEWS, ELEVATIONS, SECTIONS AND DETAILS

VOL. II

BY

WILLIAM H. RANLETT,
ARCHITECT.

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INDEX.—VOL. II.

| PLATES. | | |
|---|--|---|
| DESIGN XXII.— <i>Cottage Villa in the Rustic Style.</i> | DESIGN XXXII.— <i>Italian Villa.</i> | DESIGN XLIV.— <i>English Cottage, ornamented in the Swiss Style.</i> |
| DESIGN XXIII.— <i>Cottage Villa in the Italian Style.</i> | DESIGN XXXIII.— <i>Italian Villa.</i> | DESIGN XLV.— <i>Cottage Villa—Italian Style.</i> |
| Plate 1. Two perspective views. " 2. Floor plans and sections. | Plate 22. Two perspective views. " 23. Floor plans and details. " 24. Details. | Plate 43. Design for a Wlaery and Green House. " 44. Section, Isometrical floor plans and details. " 45. Two perspective views. |
| DESIGN XXIV.— <i>A Plain Cottage—English Style.</i> | DESIGN XXXIV.— <i>Cottage, English Style.</i> | DESIGN XLVI.— <i>Cottage Villa—Italian Style.</i> |
| DESIGN XXV.— <i>A Plain Cottage—English Tudor Style.</i> | Plate 25. Floor plans and details. " 26. Two perspective views. " 27. Floor plans and details. | DESIGN XLVII.— <i>English Cottage, Rural Style.</i> |
| Plate 3. Two perspective views. " 4. Floor plans and sections. " 5. Design for a Coach-house, ground plans, sections, and details. " 6. Ground plot of 4½ acres on Staten Island. | DESIGN XXXVI.— <i>Cottage Villa—semi-Italian Style.</i> | Plate 46. Two perspective views. " 47. Section, floor plans and details. " 48. Details for a grapery. |
| DESIGN XXVI.— <i>Italian Bracketed Villa.</i> | Plate 28. Two geometrical elevations. " 29. Ground plot for Waldwie Cottage. " 30. Elevations and profiles of wood fences. | DESIGN XLVIII.— <i>Villa in the American Style.</i> |
| Plate 7. Perspective view. " 8. Floor plans. " 9. Two geometrical elevations. " 10. Working plans. " 11. Floor plans and details. " 12. Ground plot and profile of 1½ acres. | DESIGN XXXVII.— <i>Anglo-Norman Villa.</i> | Plate 49. Section and floor plans. " 50. Two geometrical elevations. " 51. Details. |
| DESIGN XXVII.— <i>Villa in the Persian Style.</i> | Plate 31. Two geometrical elevations. " 32. Floor plan and details. " 33. Details. " 34. Details. | DESIGN XLIX.— <i>Villa in the Tudor Style.</i> |
| DESIGN XXVIII.— <i>Villa in the mixed Style.</i> | DESIGN XXXVIII.— <i>Cottage Villa in the Anglo-Norman Style.</i> | DESIGN L.— <i>Villa in the Greco-Italian Style.</i> |
| Plate 13. Floor plans. " 14. Two geometrical elevations. " 15. Two geometrical elevations. | Plate 35. Perspective view, and two geometrical elevations. " 36. Isometrical view of floor plans, section and details. | Plate 52. Floor plans. " 53. Two perspective views. " 54. Details. |
| DESIGN XXIX.— <i>Cottage in the Rustic Style.</i> | DESIGN XXXIX.— <i>Isometrical plans, &c., for a cheap house; and details.</i> | DESIGN LI.— <i>Stone Villa in the Italian Style.</i> |
| DESIGN XXX.— <i>Bracketed Cottage, English Style.</i> | DESIGN XLI. & XLII.— <i>Two plain Cottages.</i> | Plate 55. Floor plans. " 56. Two geometrical elevations. " 57. Longitudinal section and floor plan. " 58. Details. |
| Plate 16. Two perspective views. " 17. Design for a barn, floor plans, and details. " 18. Details. | DESIGN XLII. & XLIII.— <i>Ornamented.</i> | DESIGN LII.— <i>Cottage Villa in the Anglo-Swiss Style.</i> |
| DESIGN XXXI.— <i>Italian Villa.</i> | Plate 37. Isometrical views and details. " 38. Four perspective views. " 39. Floor plans and sections. | DESIGN LIII.— <i>Cottage Villa in the earliest English Style.</i> |
| Plate 19. Two geometrical elevations. " 20. Floor plans. " 21. Floor plans. | DESIGN XLIII.— <i>Double house—Italian Style.</i> | Plate 59. Section, floor-plans and details " 60. Two perspective views. |
| | Plate 40. Two geometrical elevations. " 41. Details. " 42. Isometrical floor plan and details. | |

| | | | | |
|---|---|---|----------------------------|--|
| ESSAYS. | Specifications for Designs XXXIV. & XXXV. | 41 | American Houses, | 70 |
| Cottage Architecture, | 5 | Form of Contract, | 42 | Description of Plates for Designs XLVIII, XLIX. & L., |
| What to build, | 7 | Description of Plates for Designs XXXIV. & XXXV. | 43 | Table showing the various sizes of Slate, cost, &c., per square, |
| Specification for Design XXII., | 8 | Estimates for Designs XXXIV., | 44 | Table showing the cost of sashes, and the various brands of glass, |
| Description of Plates, XXII., XXIII., XXIV. & XXV., | 10 | XXXV. & XXXVI. | 45 | Table showing the quantity of material, various qualities and cost of a square of shingle roofing, |
| Styles and Sites, | 10 | The Anglo-Norman Style of Architecture, | 45 | Estimates for Designs XLVIII, XLIX. & L., |
| Wood Cut of Design XXVIII., Vol. I., | 11 | Wood cut representation of a Cottage built by A. W. Clason, Esq., | 47 | Wood cut representation of an Italian Villa for J. P. Swain, Esq., |
| Estimates for Designs XXII., XXIII., XXIV. & XXV., | 12 | Marine Cottages, | 47 | Shadows, |
| Specifications for coach-house, Plate 5, | 12 | Extract from Specifications of Designs XXXVII. & XXXVIII., | 48 | Wood cut representation of a Suburban Villa, designed for Messrs. G. & H. Dexter, |
| Anglo-Italian Villas, | 13 | Description of the Plates for Designs XXXVII. & XXXVIII., | 49 | Remarks upon do. |
| Specifications for Design XXVI., | 15 | The Color of Houses, | 50 | Estimate for Green House and Vinery, |
| Description of Plates, Design XXVI., | 18 | Estimate for Design XXXVIII., | 52 | Description of Plates for Designs LI, LII. & LIII., |
| Wood cut representation of the residence of P. A. Stockton, Esq., | 19 | Wood cut representation of the country seat of E. Bement, Esq., | 53 | Specification for Design LI., |
| Marine Villas, | 19 | Remarks upon do. | 53 | Table showing the cost of 100 cubic ft. of stone-work, |
| Estimate for Design XXVI., | 20 | Cheap Houses, | 54 | Table showing the cost of 100 cubic ft. of brick-work, |
| Nomenclature of Dwellings, | 21 | Description of Plates for Designs XXXIX., XL., XLI. & XLII., | 57 | Table showing the number of nails to a pound and their lengths, |
| Specifications for Design XXVII., | 25 | Estimates for Designs XXXIX., XL., XLI. & XLII., | 59 | Table showing the number of boards and nails to a square of siding, |
| Description of Plates for Designs XXVII., XXVIII., XXIX. & XXX., | 27 | Permanent Dwellings, | 61 | Table showing the number of planks and nails to a square of flooring, |
| Estimates for Designs XXVII., XXVIII., XXIX., XXX. and Barn, | 28 | Painting the Interior of Houses, | 63 | Estimates for Designs LI, LII. & LIII., |
| Venetian Architecture, | 29 | Description of Plates for Designs XLIV., XLV. & XLVI., | 65 | Table of information for lead pipe and sheet lead, |
| Wood cut representation of Waldwic Cottage, | 31 | and Green House, | 65 | Notice, |
| Description and ground plan of do. | 32 | Table showing the capacity of cisterns, &c., | 67 | |
| Specifications for Design XXXI., | 33 | Estimates for Designs XLIV., XLV., XLVI. & XLVII., | 68 | |
| Specifications for Design XXXII., | 34 | Table showing the cost of various kinds of Plastering, | 68 | |
| Specifications for Design XXXIII., | 35 | Wood cut representation of a Persian Villa, | 69 | |
| Description of Plates for Designs XXXI., XXXII. & XXXIII., | 35 | | | |
| Estimates for Designs XXXI., XXXII. & XXXIII., | 36 | | | |
| Wood cut representation of a Grecian Cottage, Passaic River, N. J., | 37 | | | |
| Cottages and Living Cottages, with wood cut, | 37 | | | |

COTTAGE ARCHITECTURE.

IN the designs of our first volume a good many examples of Cottage Architecture were exhibited, adapted to residences of very humble pretensions, so far as mere cost was concerned, yet showing, what has been the chief aim of this work, that beauty and convenience are not only entirely compatible with strict economy, but that they are, in reality, infinitely cheaper than ugliness and inconvenience. There is no necessity that any man in this country, however humble in position, or restricted in means he may be, should live in an ugly or ill-constructed house. The rich man may build himself a beautiful Villa, but he cannot enjoy its beauty by looking out of his own windows; his neighbor will see more of it than himself; it is therefore as necessary for the lover of beauty in art to promote good taste among his neighbors as to possess it himself, since he must of necessity see more of his neighbors' houses than he does of his own. The Earl of Burlington, who was celebrated for his taste in architecture, having built himself a town house, with a very beautiful facade, was recommended by one of his friends to hire the house opposite to it that he might be able to enjoy the view of it.

If it is an object with rich men who build country houses, to surround themselves with fine trees, and so place their mansions that they may enjoy charming prospects, it is surely of the first importance that the houses of their neighbors should not be of a character to mar the beauty of the landscape. It is their duty therefore to disseminate correct architectural information, and to aid every endeavor to render true principles of ornamentation in building popular. Our work is intended as much for the million as for the wealthy few, to whose tastes exclusively architectural publications have heretofore been directed.

Men of moderate circumstances and the really poor have been so long accustomed to plain, uncomfortable houses, that beauty and convenience have come to be regarded as solely the right of the wealthy and independent. We trust that something has already been done in the preceding numbers of this work to dispel such a degrading delusion. The humblest Cottage should in beauty of form and convenience of construction be equal to the finest Villa, and the laboring man may without any extra expense be sheltered by a roof constructed upon the same principles of architectural beauty as that which shelters his wealthy employer. As the sun shines, the rain falls, flowers blossom, the stars twinkle, and birds sing for all, so are the discoveries of Science and the progress of Art for all. If it were the sole purpose of the Architect to construct showy houses for the rich, and if his art were not to be employed in improving and embellishing the dwellings of the poor, as well as in rearing splendid churches and spacious mansions, his noble profession

would lose half its dignity. The great Architects of the past employed their talents solely in the service of the rich, or the church. They built palaces, cathedrals, castles, halls, towers, and arches, but their genius never stooped to the humble homes of the poor. The laborers who aided in raising the magnificent piles, which now exist, the wonder and admiration of travellers in Europe, lived themselves in wretched cabins upon which the Architect had never cast his eye. By the side of the palace and the cathedral was the rude, uncomfortable house of the laborer, whose wants and aspirations had never been heeded by the Architect. But the Architect of the present day directs his thoughts to very different objects from those that employed the genius of the Palladios, the Jones' and the Wrens. If we can boast of neither palaces nor cathedrals in America, we can point to the houses of the poor which have been modeled and embellished by the genius of the Architect. In every part of the country the eye and the heart are gladdened by evidences of the growing tendencies of the age to equalization of condition, in the numerous little gems of architecture, constructed of the coarsest and cheapest materials, which abound in the vicinity of our large towns, and are not unfrequently found in the half-cleared wilderness. The poor man is regarded as having equal capacities for enjoyment as the rich, and the Architect plans the house of the laborer as well as that of the employer. The ugly thatched cottage of the English clothopper seems to have been built for beings of a wholly different race, having lower instincts and baser appetites, than those that inhabit the sumptuous residences of the nobility and gentry of England. It is not merely a difference of condition, but of thought and feeling and species that is indicated by the different dwellings. It is not so with the modern dwellings of our own country. The house of the rich man differs in size, in costliness of material and in ornamentation, from that of the poor man; but they are both evidently designed to shelter the same class of beings, who differ from each other only in the accidents of fortune. The Villa of the wealthy merchant is nothing more than an enlargement of the Cottage of his poor laborer; but the house of an English laborer could not be enlarged into a residence fit for his employer.

Although much has already been done to meet the growing wants of our rapidly increasing and rapidly improving population, as respects architectural knowledge, yet much still remains to be done for the comfort and elevation of the people, and beautifying the incomparable sites for building which abound in the suburbs of our great cities. In the succeeding numbers of the Architect we shall present a great number of designs for Cottages of a moderate cost, as well as of Villas and country mansions of a more costly and ornamental character.

WHAT TO BUILD.

ALL animals whose necessities require an artificial shelter, except man, are blessed with an architectural instinct; they know exactly what, and when, and where, and how to build. But man the most intelligent of all the living creatures that inhabit the earth, is the only one that makes mistakes in constructing an edifice for himself and his young. After experimenting in house-building through thousands of ages he is still uncertain as to what constitutes a house, while the bees of last summer constructed their cells in the same form, of the same materials, and on the same principles as did the "singing masons" that built their "roofs of gold" in the time of Virgil. But as man is a progressive animal, and as the bee is not, the one must continue to change his house as he changes his habits, while the other must continue to the end the same being that he was in the beginning. Some architects, however, of our own age, appear to have imbibed a belief that men, like bees, should always inhabit the same kind of house, and although they may change in their thoughts, their habits, their speech, their religion, and even their country, that the houses which they inhabit must always remain the same. We read the other day in an architectural work published in this country the following amusing note:

"Individual habits and hereditary descent, when they are sufficiently marked, may give a certain fitness to a given style of architecture. We could mention a gentleman of large possessions in this country, who is descended from an old Dutch family, and who has lately built a magnificent country residence in the Anglo-Italian style. We never see it without thinking how much additional fitness and propriety he might have conferred on his estate by building a fine specimen of the old Dutch, or Flemish mansion, and making it a family museum of the superb specimens of Dutch furniture and interior decoration which were still within his reach."

The gentleman alluded to in this most remarkable note, who had the good sense to build himself a house adapted to his domestic wants, the exigencies of the soil and climate and the refinement of the times, happens to be the descendant of ancestors who came to this country two hundred years ago, from Holland; and therefore, says our architect, instead of building himself a mansion having all the elegancies and conveniences which the progress of Art and the discoveries of Science have placed within the reach of the present generation, he should have "added to the fitness and propriety of his estate," by building one of those fantastic, sharp roofed, rambling edifices which some of his ancestors might possibly have inhabited two or three hundred years ago in the cold, wet climate of Holland, and have surrounded himself with a collection of grotesque inconveniences in the shape of high and straight-backed oaken chairs, rickety old tables, japanned clocks and iron candlesticks. For the sake of carrying out the "fitness and propriety" of the thing, the Architect should have recommended the gentleman to talk low Dutch, to substitute schnaps for coffee, and wear a steeple crowned hat and innumerable pairs of breeches. According to this theory of Architecture, all that a gentleman need trouble himself about in building a house, would be to find out what part of the world his ancestors had emigrated from, and construct his mansion exactly in the style of that which they had inhabited, and thereby "confer additional propriety and fitness on his estate."

In the first Volume of the Architect, we gave a great variety of examples of ornamentation in Cottage and Villa Architecture, which were all subordinate to the adaptation of the house to the exigencies of the climate, and the habits of the people. The laws of nature never differ, the heats of summer, the snows of winter, the drenching shower and the bleak north wind call for precisely the same defences in all ages, and in all countries; it is the business of the Architect to use the proper means to shield his employer from the elements; but every man who builds a house may ornament it according to his own fancy, if he have any; all that the Architect is required to do, is to see that the style of ornamentation is consistent with itself; the descendant of Dutch ancestors may build a Greek portico in front of his house with as much propriety as though he could trace his descent up to Ictinus of Athens, and a scion of the Pandolfi family might construct a Dutch castle, all garret and gable, on the banks of the Hudson with as much fitness and propriety as the descendant of Peter the Testy. If men are to be bound down by the ignorance or whims of their ancestors, and carry their grist to mill balanced by a stone, because their grandfathers did so before them; then there will be an end to all improvement in Architecture as in every thing else. The Architect whose note we quoted would probably be gratified to see the people of Dutch descent who live in Albany, making voyages on the Hudson, in such square-bowed vessels as their ancestors sailed in, when they first navigated that river.

SPECIFICATIONS.

Of the Materials and Labor required in the erection of Design XXII.

MASON'S BILL. Excavations made for the cellar and cistern, and the earth properly packed. Stone walls for cellar 12 inches thick, and for cistern 16 inches thick. Suitable foundations under the chimney and porch. Two steps and four for the cistern, 10 inches set. The height of the stone, two of them polished. Two 12 by 11 in. posts in cellar, two 12 by 12 each under porch, and four 8 by 8 under veranda columns. Chimney on pier in cellar. Three fire places, one for the kitchen with crane hooks, and for gate, (to be set, and worth \$12.00) and one cemented for wood fires. The flues plastered and tipp'd out, and ornamented, as per elevation; all the outside walls filled in with brick set on the edge. Cistern 6 feet diameter 8 feet deep, 8 inches thick built in a wall. Two rooms in the second story to be bathed and plastered, two coats of brown mortar and hard finished. Kitchen, pantry, closets and cellar ceiling bathed and plastered and heavy coat of brown, slipped, and with the cellar walls whitewashed, two coats. All the mortar for the stone work, brick work, and plastering, to be made in a proper manner from Thomaston lime, and sharp bank sand.

CARPENTER'S BILL. Frames of good sound spruce or pine timber. Posts, sills, plates, and framing beams 4 by 6 inches, intarsies 4 by 6. First and second floor beams 3 by 8; 16 inches between centers. Rafters 3 by 6. Braces and studs 3 by 4. Windows and doors double studded. The roof and porch to be covered with 12 in. planks, set on the edge, and the walls of main house and porch, the projecting roof to have plank planed on the underside, and covered with first quality white pine split shingles, laid three thick. The valleys underlaid with sheet lead, 3 lb. 2 lbs. to the foot 10 inches wide. Cornices of cedar, mellow, tapered and grooved planks, planed both sides and beaded on the underside. Cornices, gutters, corner boards and water-table, of clear lumber, put up strong. Buckets under main and porch roofs. Rafters, purlins, and columns of veranda, and the railing and filling to be cut from cedar or oak, and put up neatly with the bark left on. Floors in the interior of best mill'd pine plank. Veranda and platforms of narrow mill'd plank, blind milled. Stairs from the first to the second story, open oak and 12 in. by 2, square balusters 1 1/2 in. square, turned round 1 1/2 inches, milled steps and string. A strong step balustrade to basement, steps to porch and veranda base 1 in. thick, 6 inches high, in both stories. Windows. One, 15 lights, 9 by 11; three 12 lights, 9 by 14; one 12 lights, 9 by 14; five 12 lights, 9 by 12; one 12 lights, 9 by 12; three 12 lights, 9 by 12; good strong glass, and the sashes one and a half inches thick, and



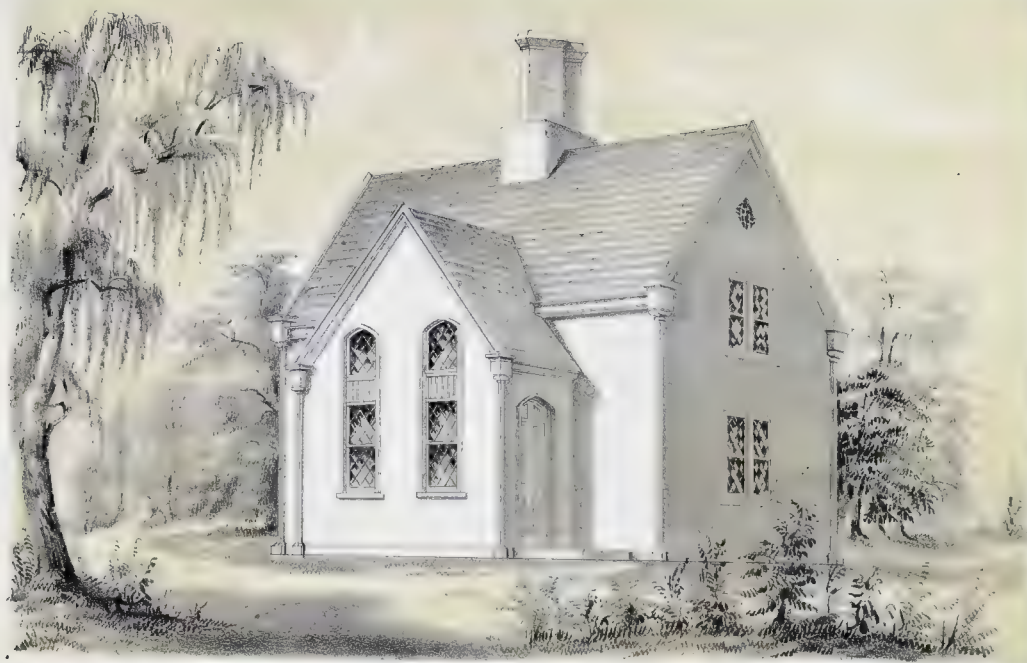
COTTAGE VILLA.

in the Italian Style



COTTAGE VILLA.

in the Italian Style



A PLAIN COTTAGE
English Style

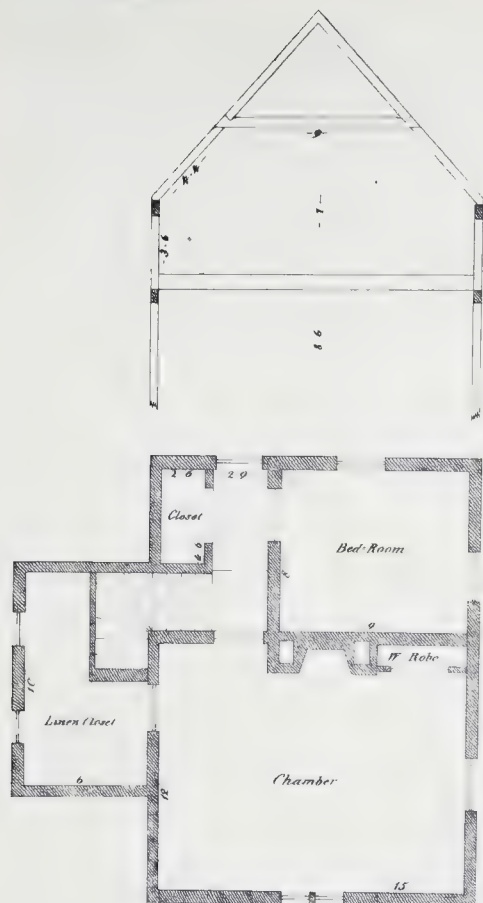
DESIGN XXV



Designed & Del. by Wm H. Randell.

A PLAIN COTTAGE.
English Tudor Style

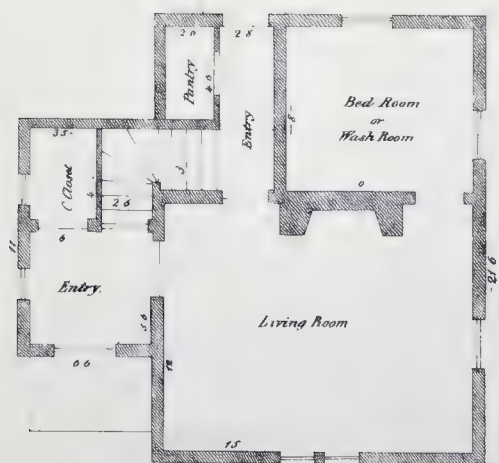
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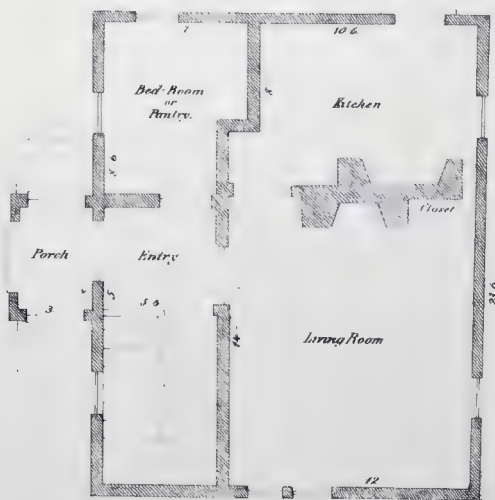
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CHAMBER STORY

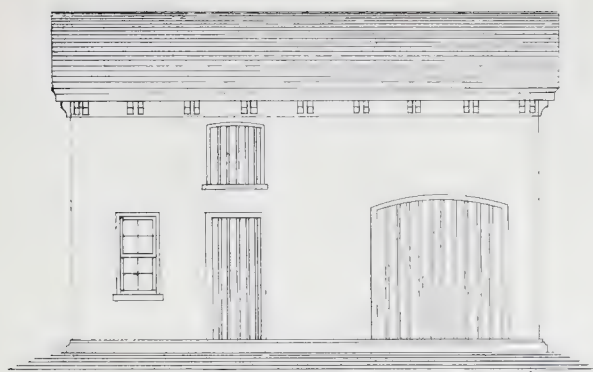


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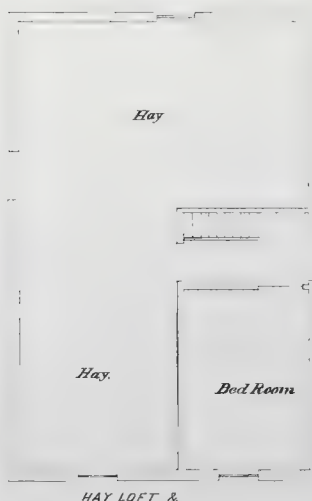
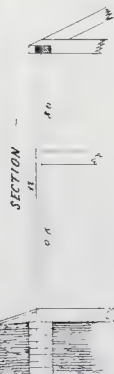
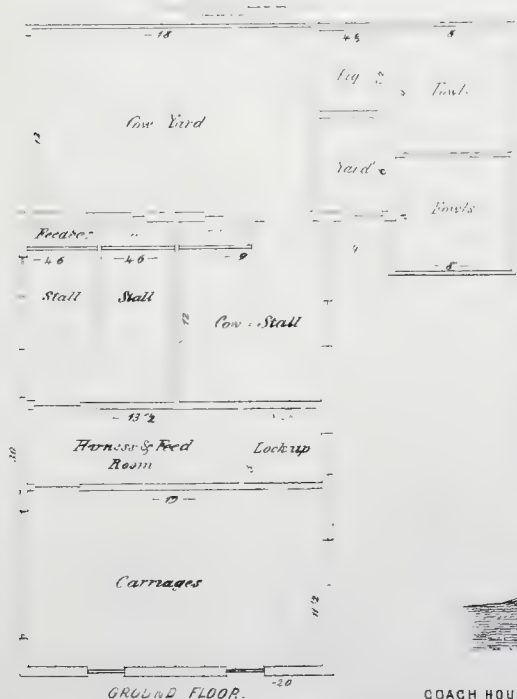


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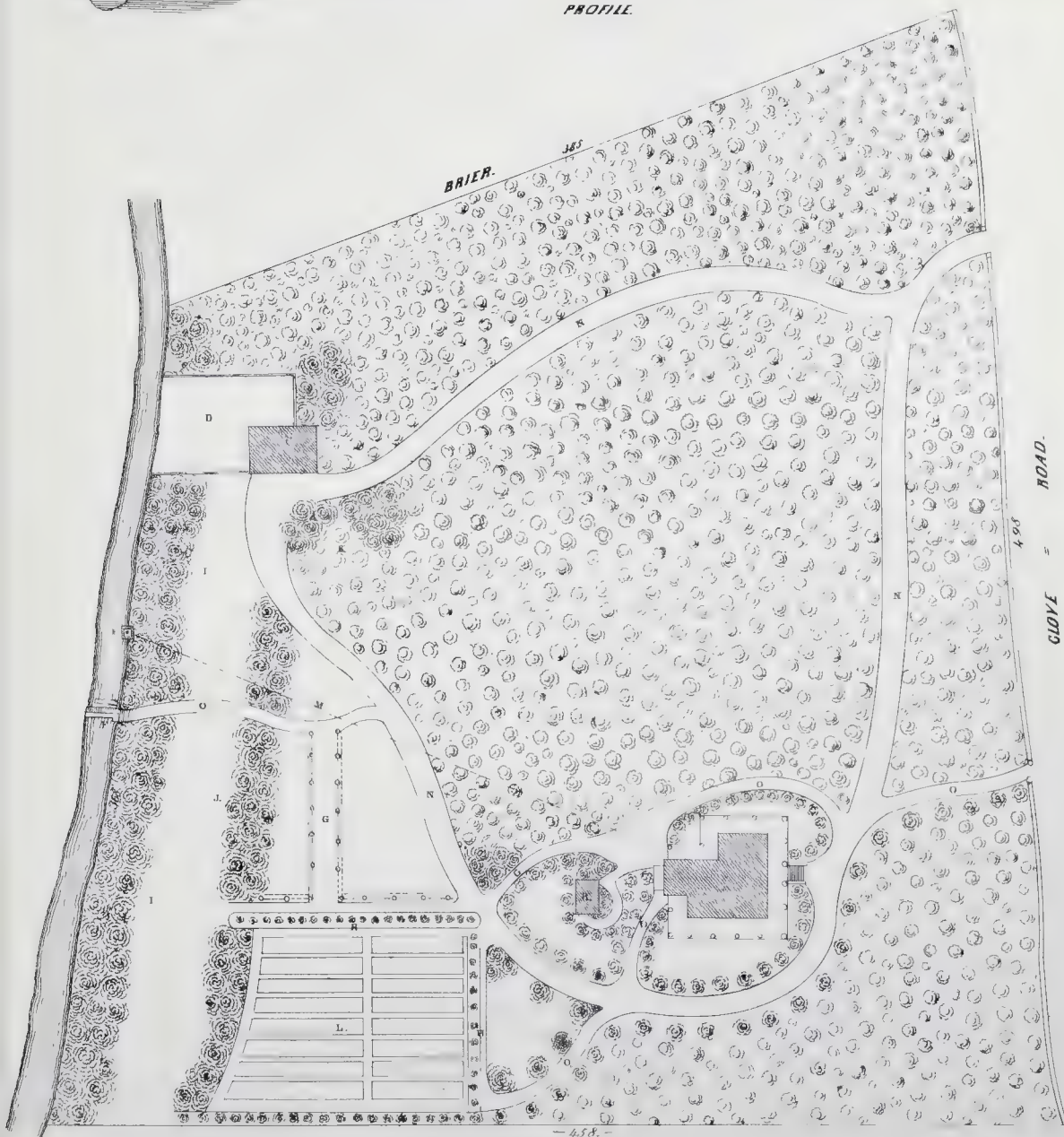


PROFILE & FACE SECTION
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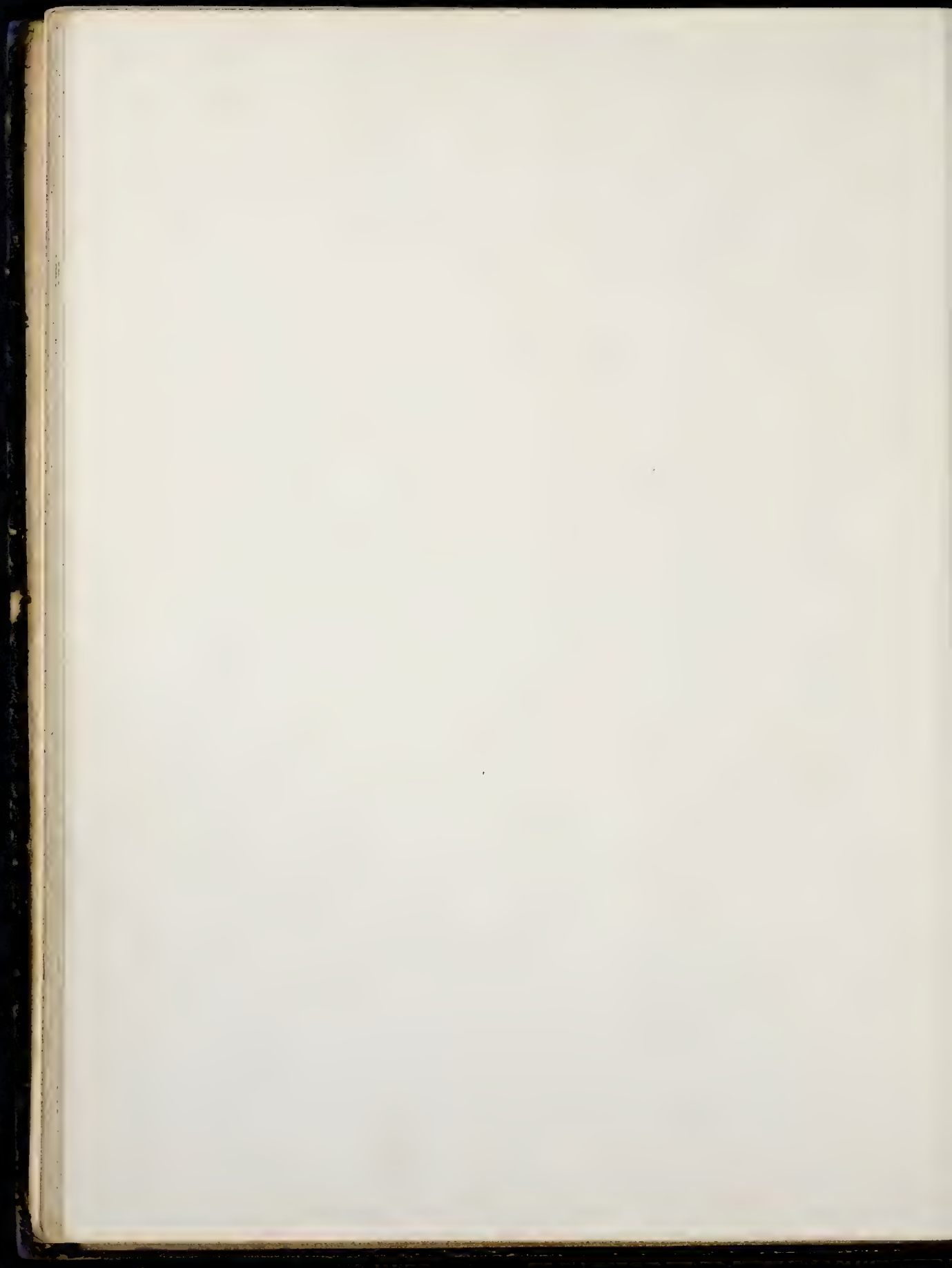


COACH HOUSE & STABLE

Scale 8 Ft. Elevation & Ground Plans



GROUND PLOT.
of 4 1/2 acres



SPECIFICATIONS

23

double hung in the front set by sash and weights. ... Rolling blinds to all the windows in front and second stories. Doors. ... Outside door in front, 4 1/2 inches thick, two panels and eight lights of clear strong glass, 8 by 13. ... Back front door 4 1/2 in. thick, two panels, moulded outside ... all other doors 4 1/2 in. thick, 4 panels, each moulded in on side, hung by 3 1/2 by 3 1/2 inch patent bolts, and secured by first quality iron bolts with mineral heads. ... Vent near mantels and heads to doors. ... All the chests and windows to be neatly shrouded and fitted up with hooks, &c. ... Painting. ... All the wood work outside and inside, except the stonework, to be painted with two coats of pure white lead and linseed oil put on at proper times. The front, all to be stopped. The back end to be shrouded a brown or ash color. The blinds to have three coats of paint, the best two a honey green.

Design XXIII. to be built nearly in the same manner as Design XXII. The siding with clear 5 & 6 inch, laid 1 inch to the wall. ... The chimney, filling in and plastering, the framing, siding, roofing, studding, flooring, base and doors, the same as for Design XXIII. The stairs close. Windows all with the glass set diagonally in the sashes; three cellar frames, each 6 lights, 10 by 12, glass plain. Airie, steps, coping, and brick piers same as for Design XXII.

Design XXIV. ... Cellar under the main house and wing. ... stone wall 18 inches thick, 4 feet 6 inches high, finished with a brick wall 2 feet high and 8 inches thick; the chimney, filling in and plastering, the framing, siding, roofing, studding, flooring, base and doors, the same as for Design XXIII. The stairs close. Windows all with the glass set diagonally in the sashes; three cellar frames, each 6 lights, 10 by 12, glass plain. Airie, steps, coping, and brick piers same as for Design XXII.

Design XXV. ... A cellar under the main house; with airie steps, coping, piers, and all other proper part details, the same as for Design XXVI.

DESCRIPTION OF PLATES.

PLATE 1.—Ground plans, framing and wall sections of two Cottage Villas. Designs XXII. and XXIII.

PLATE 2.—Design XXII. Perspective elevation of a Cottage Villa with details in the rustic style. Design XXIII. Perspective elevation of a Cottage Villa, the general exterior detail in the Italian style.

PLATE 3.—Ground plans, framing, wall and roof sections for two cottages.

PLATE 4.—Designs XXIV. and XXV. Perspective elevations of two Cottages—the exterior ornamented with the Tudor details in the English style.

PLATE 5.—Front and side elevations and two ground plans of a Coach house and Stable (now being built in the "Romanesque" style, and for the Villa, design XVIII. Vol. I.) with yards for cows, pigs, and fowls—the latter to have a house adjoining with rooms for roosting, hatching, &c.

PLATE 6.—Ground plot of 4 1-4 acres of ground on Staten Island, the front on the Clove road, and rear on a brook of clear cold spring water. A dam is raised making 2 feet 6 inches fall of water, from which a strong lead pipe (1 1-4 inch) 50 feet to a Hydraulic Ram, which carries the water through a 1-2 inch medium pipe 350 feet to the house, with a perpendicular height of 30 feet (the same will be continued into the house 10 feet higher, supplying a reservoir for a bath, water closet, and kitchen), discharging 350 gallons per day. The Villa is placed on the highest ground (see profile), about 100 feet from the road and 70 from the southern line. The lawn is on the north of the house and filled with the choicest fruit trees, the vegetable garden on the south-west, and flower gardens and parterre's on the south and east, with borders on the north side. The stable at a convenient distance, 450 feet, from the house; a privy and wood-house 10 by 16 feet, connected, about 50 feet from the rear of the house, to be screened by a thick hedge of evergreen.

STYLES AND SITES.

MANY writers on domestic architecture have indulged in whimsical speculations respecting the style best adapted to particular sites, recommending the Castellated style for a hilly or mountainous region, the Italian style for a prairie country, the Grecian style for the bank of a river or the sea side; but all such distinctions are purely fanciful and entirely devoid of any sound reason. The best style is always that which best suits the taste of the builder, let the site be where it may, keeping in mind, of course, certain principles respecting the pitch of the roof and other particulars which must conform to the climate and the nature of the soil. These principles can never be disregarded but at a sacrifice of beauty; a flat roof cannot be made to look proper in a country where snow falls, whether the site be amid hills or in the middle of a plain, by the sea side or on the banks of a river. The object of a roof is to protect the dwellers in the house from the weather, therefore any covering which fails to do this is imperfect in design and consequently cannot afford pleasure to the eye, as it must continually be suggestive of discomfort; for nothing can look more offensively incongruous than a flat-roofed house in a climate subject to heavy falls of snow. The steep roofs of the old Cathedrals, in the north of Europe were constructed expressly to allow the snow to slide off; as were the roofs of the early dwelling houses in this country. Every primitive style of architecture grew directly from the wants of the people who originated it. The old country houses which are still found in great abundance on Long Island, Staten Island, New Jersey and a part of Pennsylvania, are the finest models that can be devised for suburban dwellings. Most imperfect in their details many of these buildings are, but there is a wonderful harmony of design which pervades them all. They universally have a frontage to the south-west with the front roof projecting far enough to form an umbrage in summer, while the back roof is in most instances a story lower than the front and without windows, to serve as a protection against the north winds. These are principles which never should be overlooked. A country house should always have a southern front, and the

northern side should always be without a veranda and devoid of ornament, because ornaments require light and shadow to give them relief, and the northern side of the house being the greater part of the day in shadow, ornamentations there would be lost. For the same reason that the northern side of a house should be defended against the prevalent cold winds of our climate, the shelter of a hill or a belt of trees should never be neglected when it can be had, and when the site of a house does not afford any such shelter, it should be the first care of the owner to plant trees in the rear of his house to defend it from the cold blast of winter, and the destructive hail storms to which we are subject at all seasons and which invariably come from that point of the compass.

The innumerable landscape sites for Villas in the vicinage of New York afford opportunities for indulging the most refined, the most voluptuous, the most romantic, or the most whimsical tastes in architecture; and we are far from wishing to put a curb rein on any man's fancy in a matter which is so purely personal to himself as the style of his house. A man's Cottage is, in this country, the casket which contains his most precious jewels; it is the nursery of his best affections, the real temple of his truest worship, where he retires to give vent to his joys or his griefs, and it should honestly conform to his tastes and his means; the fashion of it should be peculiar to himself. All that we propose is to furnish him a variety of patterns from which he may select one which accords best with his inclinations. We would not, because his plot of ground lay on a hill top, restrict him to a miniature baronial Castle, such as the robber-knights built for themselves on the rocky steepes of the Rhine and the Danube, nor prescribe for him a little palladian box because he chose to build in the centre of a meadow. Many of the examples which we have furnished in the preceding number of the Architect have been copied and built in all parts of the United States; some of them upon Staten Island, upon the most beautiful sites, we may say without fear of contradiction, to be found in the world; it is so varied, so abounding in fine views, so broken up into hills, vallies and meadows; so diversified in its scenery that it might serve as an index to the rest of the earth. This most charming Island appears to have been created expressly as a regenerator for the population of a great city. It rises in picturesque beauty from the blue waters of the bay and seems to invite the toiling denizens of the great metropolis of the New World to seek its breezy hills, its pebbly shores and green meadows, and there regain the strength of heart and vigor of limb which have been wasted in the too eager pursuit of wealth or pleasure.



The accompanying wood cut represents design XVIII. given in the first volume of this work. It is built on the Clove road near the north side of the Island, and commands a variety of prospects of unsurpassed loveliness; from the windows of the second story may be seen six beautiful cities, with their spires and white residences gleaming in the distance. There are New York, Elizabethtown, Jersey City, Williamsburg, Brooklyn and Newark; and in addition the sparkling bay with its Castellated Islands; the grey pallsades; the Passaic with its crowds of white-sailed vessels and splashing steamers; the cedar-fringed hills of the Island; a gurgling brook which supplies the house with water, and numberless beautiful villas, cottages and farm houses which surround it on every side. Orchards, meadows, fields of grain and trim gardens; a pure air, a genial soil and freedom from oppression; here are all the elements of happiness and beauty, and the Architect must be imbued with the spirit of the place and inspired by its genius to conceive his designs which shall harmonize with such surroundings, and not appear like intrusions when placed in their midst. Let those who inspect our works say whether or not we have been true to our calling and fulfilled the task which we have voluntarily assumed.

ESTIMATE.

Quantities of the principal Materials required for the following Designs.

Design XXII.—945 cubic feet of common stone work; 4000 hard brick; 9500 salmon brick; 25 ft. steps and coping; 3 blue stone hearths; 25 casks lime; 66 loads sand for brick and stone work; 462 super. yards plastering; 3295 feet of timber; 155 joists; 1258 super. ft. of shingle roof; 1818 super. ft. of siding; 385 lineal ft. of base; 1020 super. ft. of common floor; 260 super. ft. of narrow floor and roof; 11 window frames in first and second stories; 3 cellar frames; 15 lights sash and glass, 9 by 16; 40 lights, 9 by 14; 86 lights, 9 by 12; 12 passage doors and frames; 5 closet and wardrobe doors and frames; 350 ft. clear plank and boards; 60 piece planks; 75 boards; 250 lbs. white lead; 13 galls. linseed oil.

Design XXIII.—908 ft. stone work; 25 ft. steps and coping; 2 stone hearths; 8996 hard and salmon bricks; 20 casks lime; 52 loads sand for brick and stone work; 378 yds. plastering; 3123 ft. timber; 130 joists; 1810 ft. siding; 727 ft. shingle roof; 464 ft. of plank and batten roof; 890 ft. of common floor; 140 ft. of narrow floor; 259 lineal ft. of base; 750 ft. clear lumber for brackets, exterior moulding, &c.; 60 piece planks; 75 boards; 13 windows—frames and sashes complete; 2 cellar windows; 9 passage doors, frames and casings; 2 closet doors; 275 lbs. white lead; 15 gallons oil.

Design XXIV.—615 ft. stone work; 28 ft. steps and coping; 2 hearths; 4380 hard brick; 7100 salmon brick; 18 casks lime; 48 loads sand for brick and stone work; 308 yds. plastering; 2791 ft. of timber; 140 joists; 752 ft. shingle roofing; 1233 ft. siding; 779 ft. common floor; 11 window frames and casings; 147 super. ft. of diagonal sashes; 2 cellar windows; 8 passage doors, frames and casings; 6 doors and frames for closets and stairs; 240 ft. base; 400 ft. clear lumber for exterior trimmings; 35 piece planks; 45 boards; 225 lbs. white lead; 11 gallons oil.

Design XXV.—553 ft. stone work; 6900 hard brick; 4500 salmon brick; 28 ft. steps and coping; 2 blue stone hearths; 20 bbls. lime; 44 loads sand for stone and brick work; 385 yds. plastering; 3076 ft. timber; 135 joists; 1418 ft. siding; 950 ft. shingle roof; 828 feet floor; 250 ft. base; 12 window frames; 156 ft. diagonal sashes with glass; 8 passage doors and frames; 5 closet doors; 550 ft. clear lumber for exterior trimmings, &c.; 70 piece planks; 65 boards; 250 lbs. white lead; 13 gallons oil.

Design XXII. built according to the specifications will cost \$975. The outside walls of brick will cost \$1075.

Design XXIII. built according to the specifications will cost \$905. The outside walls of brick will cost \$1000.

Design XXIV. built according to the specifications will cost \$750; with brick walls, \$825; stone walls in rubble work, \$875.

Design XXV. built according to the specifications will cost \$825; with brick walls, \$895; stone walls in rubble work, \$950.

Specifications for the Coach House.

The frame of the building is of spruce. Sills, posts, framing beams, and plates, 4 by 8; girts, 4 by 6; 18 rafters 3 by 6; first and second tier of beams, 3 by 8—2 feet between centres—lower tier supported by a girder, and the second tier bridged; 7 roof beams, 3 by 8; siding, best Albany boards, planed, rebated, and laid 8 inches to the weather; gutters made strong and tight; brackets from 2 inch plank; roof of best split white pine shingles, laid three thick on hemlock boards; doors of narrow clear plank, tongued, grooved, beaded, and lined with 3-4 boards—all the outside doors are hung by strong welded straps and hooks—single doors secured by rim locks (brass keys and bolts); all other doors and shutters by hooks and staples; sashes 1 1-4 thick, good strong glass; floors, in stalls, 2 inch spruce plank, one end raised 3 inches—all other floors with milled spruce plank; one joist partition, lined on one side with tongued and grooved boards, and in the stall side with 1 1-4 plank, 5 feet high, to continue on the outsides of the stalls; the divisions of 2 inch spruce plank; partition between the Harness and Coach room, 1 1-4 milled plank, set upright; the Coach room lined with tongued and grooved boards; the exterior painted two coats of pure white lead in oil, shaded brown.

NOTE.—On Plate 6 the location of the dwelling house is represented by A; the woodhouse, B; coach house, C; stable yard, D; hydraulic ram, E; dam, F; grape arbor, G; fruit shrubbery, H; hedge of cedars, &c., I; belt of young thrifty forest trees, J; large chestnut trees, K; vegetable garden, L; water pipe from the ram, M; carriage roads, N; walks, O.

ANGLO-ITALIAN VILLAS.

THE style of the design which forms the subject of the present number of the Architect, has been designated, for the want of a better term, the Anglo-Italian, but it might with greater propriety be called the American-Italian, for it is more purely American than Italian in character, and hardly at all resembling the English style of Villas. Nearly all the modern English Villas, excepting those numerous examples of the modern Gothic, with pie-crust battlements, as Horace Walpole called them, are imitated after the *Ocelli d'Italia*, or Villas in the neighborhood of Rome. But the climate of England will not allow anything like a close approximation to an Italian Villa, which, with very slight alterations, might be adopted in our middle States; so that when the Anglo-Italian Villa was transplanted here, it immediately began to revert back to its original type, as our climate and the habits of the people bore a stronger resemblance to those of Italy than of England.

There is a richness of ornamentation and a thousand luxurious appliances in the Italian Villas, which would ill accord with the severity of our republican habits, and that predominance of economy and comfort which so distinctly mark all the efforts of American art. The Italian Villas were mostly built for the recreation of princely churchmen, who, having fortunes at their command which they had not labored to accumulate, and studying only their own pleasures, were profuse in the expenditure of money in the erection of their country houses. They employed the highest talents to be found, and their houses were as nearly perfect as the united genius of the architect, the sculptor and the painter could render them. Some of the villas with which the environs of Rome are thickly set, are the purest examples of architectural art to be found in the world. They are constructed of marble, erected in the midst of luxuriant groves, surrounded by terraces, and gardens, which abound in statues, fountains, and vases, and everything about them indicates the dwelling of the elegant voluptuary. The noblemen of England tried in vain to reproduce these Sybaritic abodes in their cold and humid atmosphere; and it is the glory of our own country, that, although we have skies as bright and delicious as those of Italy, we have neither cardinals nor noblemen, to engross the labors of thousands of men to minister to their individual wants. The man who lives in an Italian Villa, here, with but rare exceptions, must build it with the wealth which his own industry has helped to accumulate, and our "merchant princes" have too keen an appreciation of the advantages of money to squander their gettings in architectural luxuries. The pure Italian Villas and palatial residences have a monumental character, imparted by their regular proportioned tabature, which our so called Anglo-Italian Villas with

on the other side, each to have small iron grates and ash hole, with iron doors.....a fire place in the kitchen, 5 feet wide and 2 feet deep, laid up with face brick.....also an oven with patent mouth, and ash hole, doors of iron.....a cune and eys to the fire place.....a small fire-place in the chamber.....all the flues plastered and tipp'd out 8 feet above the cornice.....a brick drain, 4 inch square inside, from the cellar to the vegetable garden; an iron guting at the outlet; the brick to be laid in mortar.....two cisterns of brick, 8 feet diameter and 10 feet deep; 8 inch wall, arch tops with stone necks; cemented on the inside and made tight

PLASTERING......All the rooms, halls, closets, &c. in the first and second stories, to be lathed and plastered two coats of brown mortar and (except kitchen) hard finished; the kitchen slipped and white-washed.....all the wood partitions, ceiling, store-room and wash-room, to be lathed and plastered one heavy coat of brown mortar, slipped and white-washed.....cornices in the drawing-room (see Plate 11), Fig. 2; parlor, Fig. 1, library and dining room, Fig. 3; hall, Fig. 5; and 4 rooms in 2d story, Fig. 4. The principal and second story floors surfaced with mortar, one inch thick.

MANTLES, GRATES, AND IRON WORK......A statuary marble mantle in the drawing-room, to cost \$125.....one in the parlor, of veined marble, to cost \$100.....one in the library of black and gold, to cost \$35.....one in the chamber and two in the second story, of veined marble, to cost \$25 each. Three grates set complete, to cost \$46 each. Iron anchors to secure the beams wherever required."Walker's Hot & Cold Furnace" set in the cellar, with 5 registers in first story and 2 in the second story.

FRAME......Of sound, mill-sawed, white pine, seasoned timber.....first and second tier of beams, 3 by 12, 16 inches between centers, trimmers, 4 inches thick.....third tier in main house, 3 by 10, 2 feet between centers.....of tier on the wing, 3 by 8, 3 feet between centers.....on the north wing 3 by 10, (forming the rafters), 2 feet between centers.....wing rafters, 3 by 6, 3 feet between centers.....main rafters, 3 by 8, 2 feet 6 inches between centers.....main plates, 6 by 12.....wing plates, 4 by 10.....girts, 4 by 10.....queen posts, 6 by 12.....lances, 4 by 6.....puzzle beams and sills, 5 by 8.....roof beams, 3 by 8.....battens, 4 by 10.....gallery bearers, 4 by 8.....beams, 3 by 8.....wood lathels, 4 by 10. Partitions set with 3 by 4 joist, 12 inches between centers and laid up.....door studs, 4 by 6.....principal and second story floor beams prepared for decking.....set work walks in first and second stories, wash and store rooms to be surfaced with 2 by 4 wall strips for lathing.....and cedar shapers, 2 feet apart in the store room and cellar of south wing.

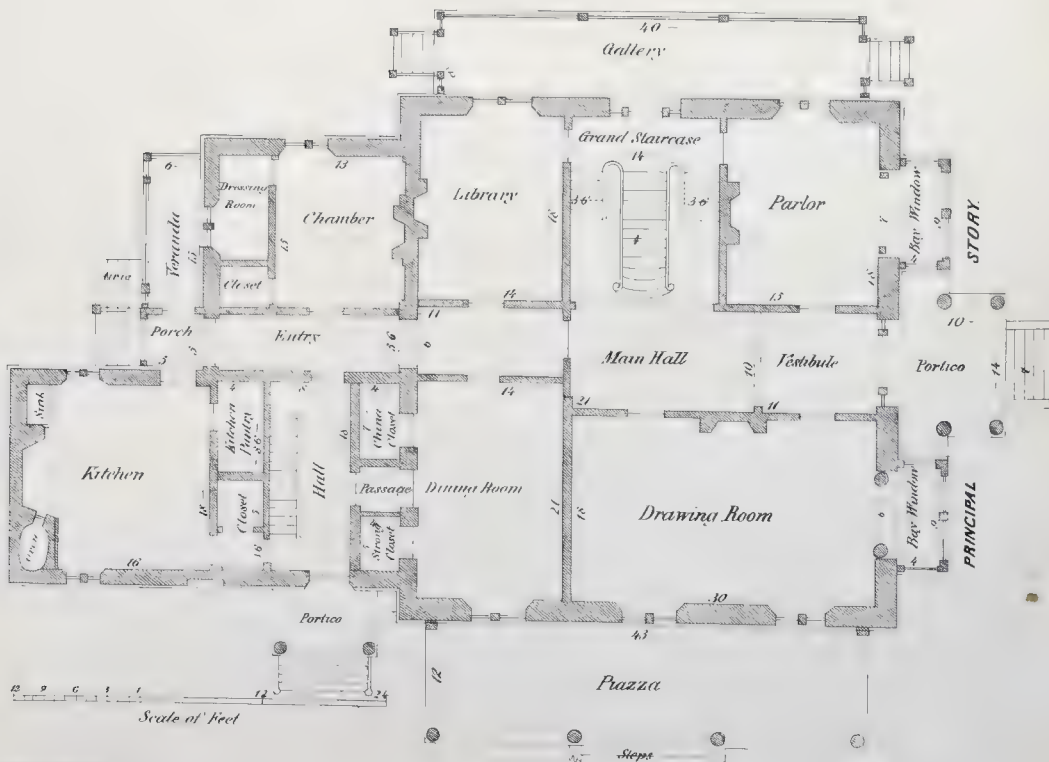
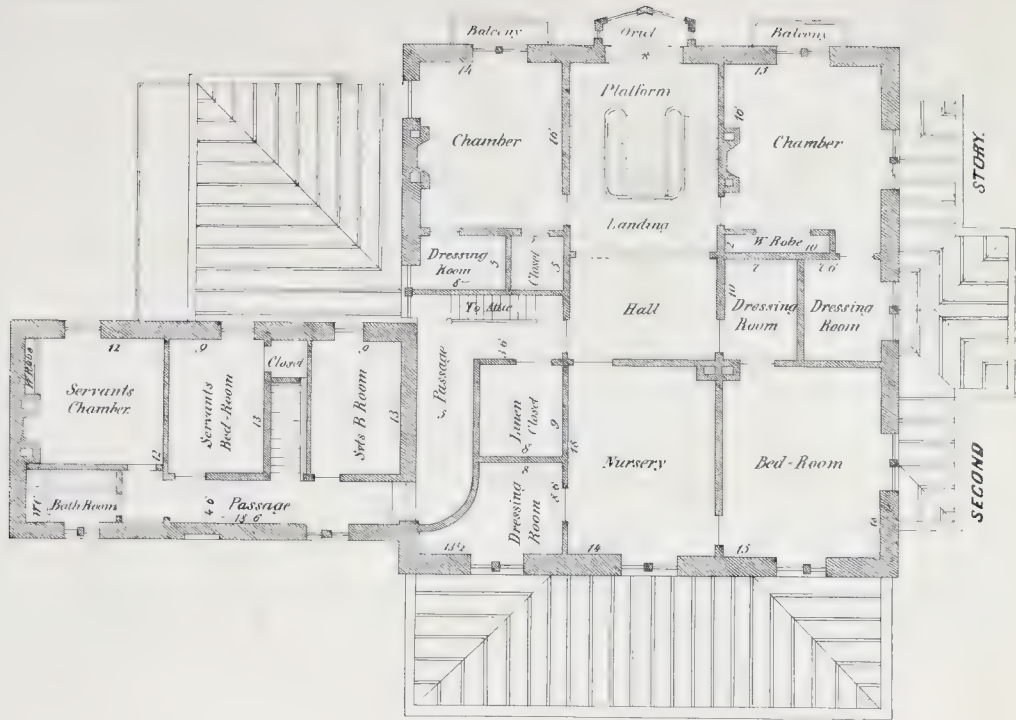
ROOFS, CORNICES, &c......The first section of main roof to be covered with first quality 3 feet cedar shingles, laid three thick on hard wood lath; the roofs of the top section, the two wings, the piazza, porticos, bay and oval windows, covered with tongued and grooved plank, and overlaid with "Naylor's patent turned iron plates," with vulc joints; the gutters lined with the same; the main gutter made with two inch clear plank, the joints grooved and tongued and put together with white lead; the brackets, railings and balusters, the same as shown in Plate 10, see description.....the veranda roof made with clear narrow tongued and grooved plank, beaded on the underside, the joints filled with white lead.....the rafters and purlins planed and beaded.....principal



ITALIAN BRACKETED VILLA.

Designed & Engr'd by Geo. H. Kneller

Wentworth & Kneller, 10, Pall Mall, N.Y.





PRINCIPAL ELEVATION.

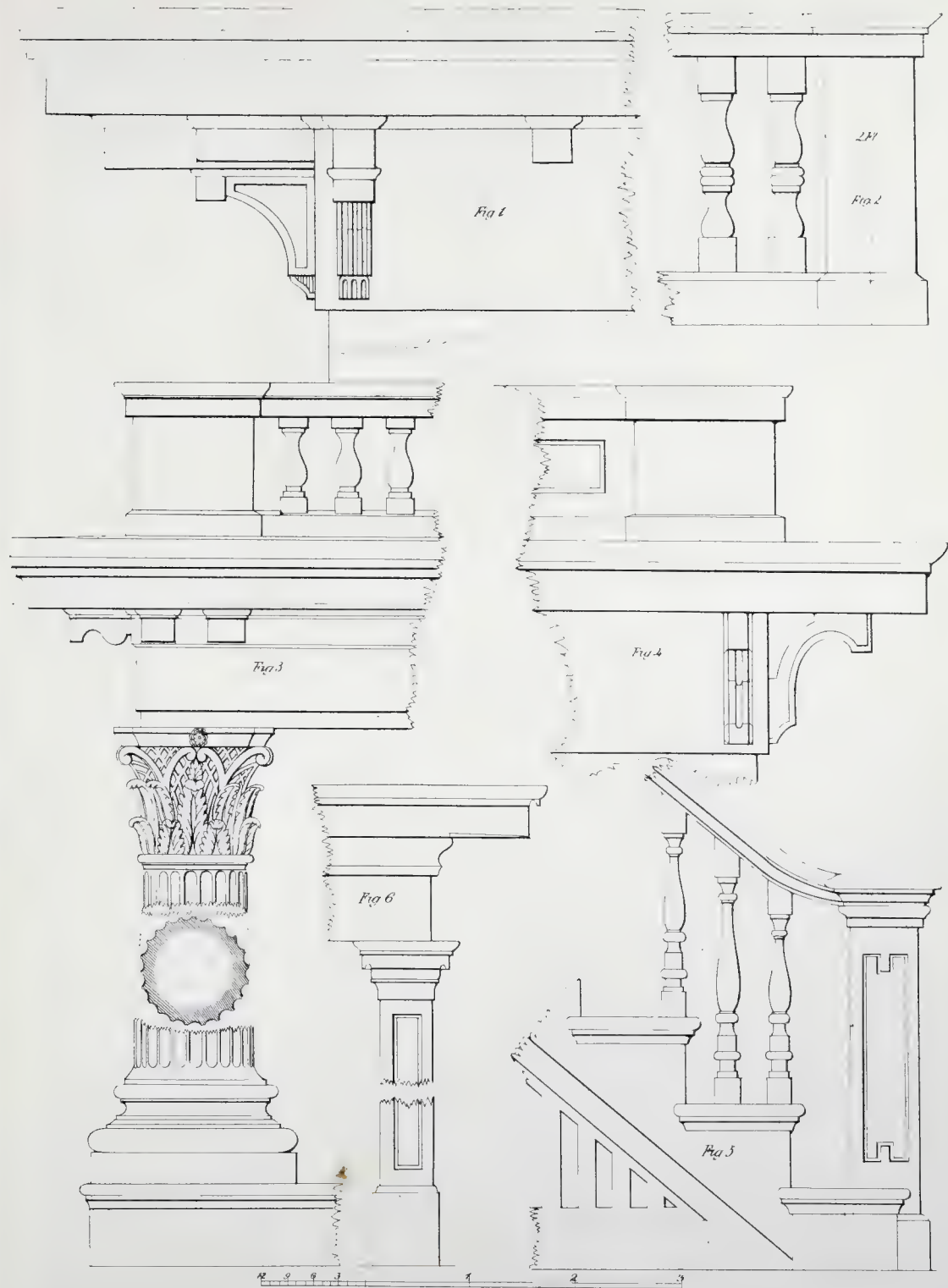


SOUTH FRONT ELEVATION.

Designed & Built by Wm H. Ranslett

Mayer & Kott, Lith. 85 William St. N.Y.

36 24 12 4 2 0 12
Scale of 12 ft to the inch



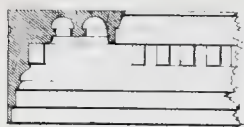


Fig. 1



Fig. 2



Fig. 3



Fig. 4

Scale 1 Foot to the Inch

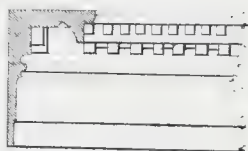


Fig. 5

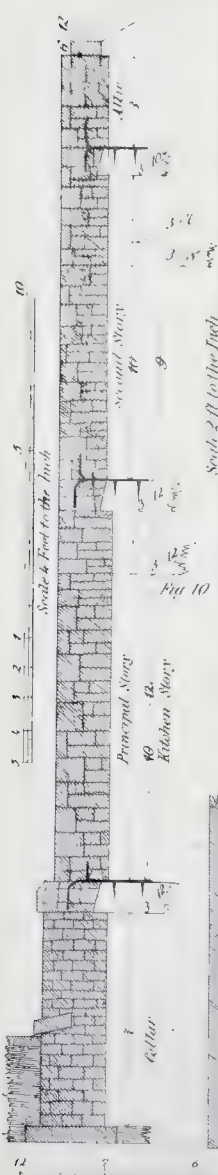


Fig. 10

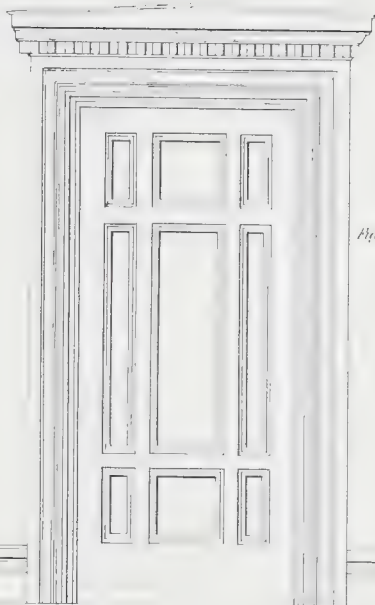


Fig. 6

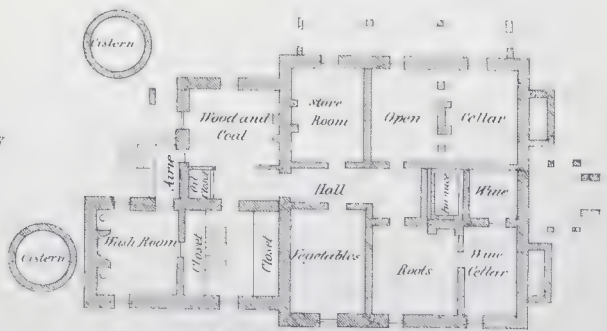


Fig. 7



Fig. 9

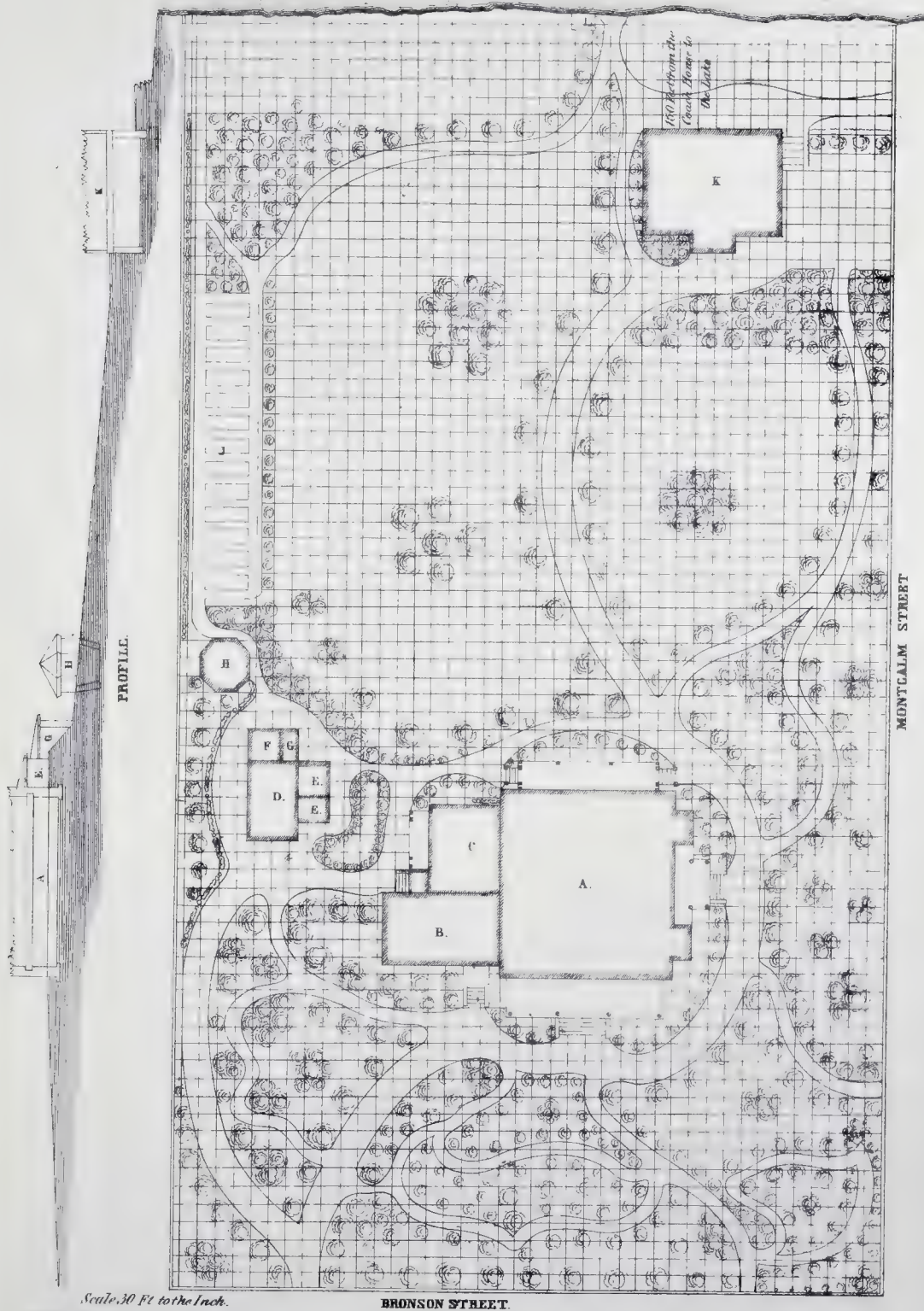
Fig. 8



Scale 2 1/2 Feet to the Inch

Scale 1/2 Inches to the Foot

LAKE ONTARIO.



Scale, 30 Ft. to the Inch.

W. H. RANLITT

BRONSON STREET.

portico and piazza roofs to be supported by eight round fluted Corinthian columns, with carved caps and turned bases, and two ante with caps and bases, two square fluted pillars (to the small portico) with caps and moulded bases; four plain square capped pillars, and railing to the veranda; gallery rail to be 3 1/2 by 7 inches, with 1 by 3 turned pine balusters, two balusters with turned wood newel posts and supports the ceilings of the portico and piazza, of narrow, clear boards; the flooring below the several floors of piazza, gallery and veranda to be open work.

FLOORS......All the interior floors of the first and second stories, attic of main house, store-room, wash-room, hall and closets adjoining, to be laid with sound milled white pine plank, strongly nailed to the beams; all the exterior floors to be laid with clear narrow white pine tongued and grooved plank, the joints filled with white lead, and blind nailed.

WINDOWS......The frames to be made with weight bars and mullions, 2 inch sills, panel backs, elbows, soffits, and shutters, fourfold, cut at the sash bar. In the first story, 3 windows, 20 lights, 13 by 22.....2 bay windows, 38 lights, 13 by 22.....2 windows, 16 lights, 12 by 20.....2 windows, 16 lights, 10 by 18.....3 windows 16 lights, 9 by 16. In second story, 7 windows, 16 lights, 12 by 18.....2 windows, 20 lights, 12 by 20.....1 window, 8 lights, 12 by 18.....oriel window, 24 lights, 12 by 20.....4 windows, 16 lights, 9 by 15.....2 windows, 8 lights, 9 by 15.....in cellar 11 windows, 16 lights, 9 by 12.....in the main roof near the gutter, 8 sashes, 2 by 3 feet, the glass to lap. the frames made for the sashes to slide in grooves opening down.....all the sashes in first and second stories 1 3/4 inches thick; all others 1 1/2 inches thick, bevel bars. Rollford crown glass in first story of main house.....Suzanne glass in the second story, wing and roof sashes.....Winslow glass in the cellar windows.....All the windows double hung by weights and cords in axle pulleys.

DOORS......In the first story of main house, 2 inches thick 9 panels moulded on both sides.... in second story, 1 3/4 thick, 9 panels, moulded on both sides.....in the first and second stories of wing, 1 1/2 inch. thick, 4 panels... the east front door to have head and side lights; north front door, side lights; south and west doors, each head lights; the glass stained in all the head and side lights.

ARCHITRAVES AND CASINGS.....In the principal story as in Plate 11, Figs. 6 and 7.....in second story, 2 inches less in width, and 3/4 of an inch less projection, and without caps..... the interior of the closets, and in the wing, the casings 3 1/2 inches wide, 1 1/4 thick, moulded.....in the cellar, 3/4 plain casings. The interior of one bay window to be trimmed with two fluted columns, carved caps and turned bases..... the other windows trimmed with two square fluted pillars and carved caps.

LOCKS AND TRIMMINGS......The front doors to have upright mortice locks, one of them with night key.....all the principal passage doors in the first and second stories of main house, to have 1 1/2 inch mortice locks.....all the closet doors, and first and second stories of wing, to have 3 1/2 inch. mortice locks.....doors in cellar, 6 inch rim locks... all the doors in wing and cellar, to have mineral knobs and bronze furniture.....doors in principal story with porcelain knobs and drops, except in the kitchen.....in second story, white porcelain knobs and drops.....doors in first story, hung by 1 1/2 by 4 1/2 butts.....in second story, by 1 1/2 by 4 butts.....in

wings, by 3 by 3 butts on collar, by 3 1-2 in. butts shutters, by 2 1-4 butts and 1 3 8 flaps, and secured by a Baldwin's patent shutter bars braced cloak and hat hooks in every closet and press in second story.

STAIRS From the principal to the second story, commencing in the centre of the north hall, running to the platform, 4 feet wide; and from each side of platform, 3 1-2 feet to landing; a double cantilev step at the bottom; two 4 inch turned and carved newels; 2 1-2 inch turned and carved balusters; a moulded rail, 6 1 2 by 3 inches; two rails on the newels; open moulded string, moulded steps, and risers bracketed.....staircase to attic, 2 feet wide, moulded steps, string and rail, (3 by 2 inches); a 5 inch newel, and 1 1 2 inch turned balusters, unbraced, enclosed with panel work.....a staircase, 3 feet wide, made the same as the last described, in the wing from first to second story.....stairs to the cellar enclosed with tongued and grooved plank; a door at the head; all the rails, newels and balusters to be of seasoned St. Domingo mahogany.

BASE, SP. Base in first story as in Pl. 11, Fig. 8. In second story, Fig. 9. In the 2 stories of story 1 1 1 thick by 7 inch high, mantle 1 in thick, 2-3 thick by 6 inches high. A neat wood mantle in the chamber over the kitchen. Borders to all the hearths. Ten bells, hung with copper wire, the tall ones pasted with the lot from top in the same room.

PRESSES, CLOSETS, &c. ... The store room, oil, and two hall closets to be strongly shelved with 1 x 6 plank
... the 1 x 6 plank shelves to be 1 foot deep, and three sets spaced, the edges loaded .. between
first, second and third set. To be done as may be required

BEAMS, PILING, &c. Heavy moulded moving blinds, made and hung (by welded hooks and plates) at the window sills, to be raised and lowered by pulley connected in fastenings... windows in the cellar and rooms, to have 2 fold shutters, hung by butts and secured by bolts. All the wood work, outside and inside, (except shingle roof, interior floors, and mahogany,) to have two coats of pure lead and tinned oil.... the mahogany to be varnished 7 coats and polished. Four inch galvanized iron leaders to the main house, 3 inch to the wing, and 2 inch to the veranda, piazza, and porches; the water to be conveyed to the street. "Water" to be let up with a 100 gall. overcast, lined with sheet lead.... supply pipe, waste pipe, vent pipe, and hot pump, as in the m. complete.

DESCRIPTION OF PLATES.

PLATE 7.—Design XXVI. Perspective view of a Villa in the Anglo-Italian style.

PLATE 8.—First and second story ground floors.

PLATE 9.—Geometrical elevations of the east and south fronts.

PLATE 10.—Exterior details.—Fig. 1, face and profile section of the main cornice; Fig. 2, of main balustrade; Fig. 3, of the piazza column, base, cap, (section of shaft), cornice and balustrade; Fig. 4, of the kitchen wing, cornice and balustrade; Fig. 5, of the gallery steps, newel, hand-rail and balusters; Fig. 6, of veranda cornice and pillar.

PLATE 11.—Interior details.—Pin of cellars and profile section of the thickness of the walls and heights of the several stories ; Fig. 1, stucco cornice for the parlor ; Fig. 2, for the drawing-room ; Fig. 3, for the library ; Fig. 4, for second story, and Fig. 5, for the main halls and vestibule ; Fig. 6, elevation of a door for the principal story ; Fig. 7, ground plan of first story, architrave and profile of the cap ; Fig. 8, profile section of the base for second story, and Fig. 9, of the principal story.

PLATE 12.—Ground plot and profile of 1 1-4 acres of ground with the location of the Villa, A, B, and C; wood-house, D; privies, E E; smoke-house, F; ash-house, G; ice-house, H; vegetable garden, I; coach-house, K; bath-house, L.



RESIDENCE OF PHILIP A. STOCKTON, ESQ.

MARINE VILLAS.

THE main design of this part of our work being that of a Villa in process of erection on the shores of what should be called the sea of Ontario, perhaps we could not add a more fitting pendant to it than the annexed view of a Marine Villa which was erected on the borders of the Atlantic, in Monmouth County, New Jersey, last summer.

This Villa was built as a summer residence for Philip A. Stockton, Esq., of New York; it is situated at Long Branch, about five hundred feet from the sea side, on a slight eminence, which commands an uninterrupted view of the Ocean. Long Branch is one of the most celebrated watering-places on the Atlantic coast, and as the cities of New York and Philadelphia increase in inhabitants, it is every year growing in importance. Mr. F. T. Grund, in his account of the watering-places of England and America, assigns to Long Branch the highest place among them all.

The Villa of Mr. Stockton, as will be seen from the Vignette, is designed expressly for a summer residence, and is adapted to the sea side, having a flat roof, bracketted and completely surrounded with double galleries. The house in the centre is well sheltered from the sea blasts and the summer heats.

The object in resorting to the sea side in the sultry summer months being recreation and comfort, gentlemen who rush with their families into crowded hotels, where the hurry-scurry and confusion consequent upon the arrival and departure of boarders, the anxiety of the host to get all he can out of his guests, to crowd as many into a room as will consent to be packed together, and to give them no more for their money than he can help, naturally causes a good many delicate people to return from a sea-side visit disgusted with their jaunt, and injured instead of benefitted by bathing and change of air.

Gentlemen who have sufficient means, and there are enough such to stud the shores of Rockaway and Long Branch with Marine Villas, would find it more economical in the end to erect houses for their families by the sea-side, instead of crowding into a hotel overpeopled with a multitude of chance visitors. The sea side cottage, or Marine Villa, being intended for occupancy only in the hot months, need not be so expensively constructed as a country house for a permanent residence.

Perhaps the term *Villa* may be rather too magnificent, strictly considered in an architectural sense, to apply to the sea-side residence which we have given an example of. The oriental palace of George IV. at Brighton is called as

Marine Villa, and is the only one so called in England. A Marine Cottage would probably be a better term, and one conveying as pleasing an idea of comfort and enjoyment as Villa. Certainly we have no residences in this country that deserve to be called Villas, if we use that term with a recollection of the Villas of Lucullus and Cicero, or of the modern Italians; it would be quite as proper to call the houses in Union Square, palaces, or our meeting houses, Cathedrals, as to call a slight Cottage *orné*, a Villa. Guilt gives the smallest dimensions of a country house to which the term Villa can with propriety be applied. He says that the smallest site of ground on which a Villa can be designed is 60 by 60 feet; anything less than that is, of course, a Cottage; the maximum size of a Villa, is, according to the same authority that of the Villa Capra of Palladio, country houses of a greater magnitude should be called mansions, excepting when, they attain a certain size, when they become palaces. These distinctions are very necessary in architectural descriptions or even in ordinary conversation, that when a house is alluded to some definite idea of its character may be conveyed by the term applied to it. From a natural peculiarity of applying magnificent terms of art to inconsiderable objects, and diminutive names to some of the grandest features of nature, great confusion is created in the minds of foreigners who are as much amazed at the size of our ponds, hills and creeks, as they are amused at the dimensions of our halls and Villas. Some of our hills are mountains, our creeks, large rivers, our ponds, lakes, and our lakes, seas; while our mansions, are small houses, our Villas, Cottages, and our halls, narrow passages. Mr. Cooper has ridiculed the national habit of amplification in some of his works, and given some very amusing instances of it in others. One of his works on England consists of letters addressed to different persons in America, and some of them are addressed to ——— of "Comstock Hall, Comstock, Mich." A short time after reading these letters, with a fine idea of Comstock Hall in our head, we happened to be traveling through Michigan, when one day the driver of the stage pointed to a small wooden house, surrounded by a slight wooden paling, and informed us that a relative of Mr. Cooper lived there, and on further inquiry we ascertained that that was "Comstock Hall," to an inhabitant of which Mr. Cooper had grandly addressed his letters from Europe, while ridiculing the magniloquence of his countrymen. We shall resume this subject of architectural nomenclature in our next number.

ESTIMATE.

Quantities of the principal Materials required for Design XXVI.

Rubble work, 4811 cubic feet, and 9451 cubic feet of block work; 202 lineal feet water table; 110 feet window sills; 78 feet moulded lintels; 64 feet plain lintels; 36500 hard brick; 23500 salmon brick; 2270 super. yards of hard finished plastering; 445 yards slipped plastering; 72 lineal feet parlor cornice; 102 feet drawing-room cornice; 140 feet library and dining-room cornice; 230 feet hall cornice; 280 feet in second story; 2361 feet iron roof.

Timber, 25244 feet; 396 lineal feet of sleepers; 1224 super. feet of narrow floor; 9365 feet interior floor; 2361 feet plank roofing; 5200 lineal feet oak lath; 5340 cedar shingles; 447 2 by 4 wall strips; 442 3 by 4 joists; 860 hemlock boards; 24600 feet of 1 inch, 1 1-4, 1 1-2, 2, 3 and 4 inch clear lumber.

Two 5 inch mortice locks with double furniture, \$7.00 each; 9 4 1-2 in. mortice locks, \$3.63 each; 8 3 1-2 do. \$3.25 each; 6 4 1-2 do. \$2.38 each; 6 3 1-2 do. \$2.25 each; 10 3 1-2 do. \$1.44 each; 10 6 in. rim locks, \$1.13 each; 7 dead locks, 35 cts. each; 24 shutter bars, 19 cts. each; 60 pair 2 1-4 butts, 5 cts. each; 42 pair 1 3-8 flaps, 5 cts. each; 13 pair 4 1-2 by 4 1-2 butts, 25 cts. each; 11 pair 4 by 4 butts, 19 cts. each; 16 pair 3 1-2 by 3 1-2 butts, 15 cts. each; 12 pair 3 1-2 butts, 10 cts. each; 10 pair 3 in. butts, 7 cts. each; 11 gross 3-4 screws, 22 cts. per gross; 3 gross 1 in. do. 27 cts. per gross; 7 gross 1 1-4 do. 36 cts. per gross; 5 dozen iron sash fasteners, \$1.50 per doz.; 1789 lbs. sash weights, 2 cts. per lb.; 65 lbs. sash cord, 31 cts. per lb.; 10 dozen sash pullies, 63 cts. per doz.; 6 dozen hat and coat hooks, 25 cts. per doz.; 13 casks flat head nails, \$4.50 per cask; 2 casks finishing nails, \$10 per cask; 2361 feet iron roof, 13 cts. per foot. 1400 lbs. white lead; 45 galls. raw linseed oil; 20 galls. boiled do.; 5 galls. spirits turpentine; 26 lbs. putty; 5 lbs. glue; 10 lbs. litharge.

Sashes—60 lights, 12 by 22, 58 cts. each; 76 do. 13 by 22, 62 cts. each; 32 do. 12 by 20, 55 cts. each; 32 do. 10 by 18, 38 cts. each; 48 do. 9 by 16, 26 cts. each; 120 do. 12 by 18, 39 cts. each; 64 do. 12 by 20, 46 cts. each; 80 do. 9 by 15, 24 cts. each; 176 do. 9 by 12, 13 cts. each; 96 do. 6 by 8, 12 cts. each; 25 feet stained glass, 90 cts. per ft.

Stone work, brick work, and plastering will require the following materials: 368 casks lime; 15 casks finishing lime; 25 casks plaster; 108 bush. hair; 55,000 lath; 5 casks nails; 5 casks cement; 359 tons coarse sand; 60 bush. white sand.

The cost of design XXVI. will be given in the 5th number of this Vol. With the above estimates of the quantities of materials required, any competent builder can, at a glance, affix the several costs of the materials and labor, to suit the location desired.

NOMENCLATURE OF DWELLINGS.

ALTHOUGH modern refinement has naturalized in our language an embarrassing wealth of terms for dwellings, so that when a house is spoken of it is quite impossible to form a correct idea of its size without the aid of a qualifying adjective, yet the names for different kinds of houses in the pure Anglo Saxon are very few and expressive. Hut, Hovel, Cottage, Hall, and Castle. These were all the names that were necessary to designate the various dwellings which our ancestors inhabited, from the King down to the Swine-herd, and even now it would be infinitely more convenient if none others were used. But there is a most whimsical and embarrassing variety of terms which we now apply to our houses. We seem to have been at a "feast of languages," and stolen a new name from each one for our dwellings. Besides the expressive old Anglo Saxon names of hut, hovel, hall, cot and castle, we have our villas, chateaux, mansions, palaces, verandas, casinos and shanties. We have a strange propensity to affix magnificent names to mean objects; but this does not arise from vanity so much as from the servile habit of seeking in the past for precedents for our present conduct. A new condition of society has created the necessity for new names, which we have not the boldness to invent for the new things which our necessities create. The small country houses which are now happily becoming so common, are neither Cottages nor Villas; neither the Romans nor the Anglo Saxons had anything like them, and consequently they had no terms for them. It is absurd therefore to borrow from these races names which have a positive meaning of their own. The *Villa* of the ancients resembled in a good many particulars the plantation residences of the South, as the hut of the negro slave resembles the hut or cot of the Anglo-Saxon serf. The Cottage *Ornè* is a ridiculously affected term, and yet it is preferable to *Villa* because it is more significant; the *Casino* of the Italians bears a close resemblance to our nameless country houses, but the name has already been degraded by its application to drinking-shops and dance-houses. People live cottagely, as Bishop Taylor calls it, without living like cottagers. Some of our wealthy merchants who reside in elegant country houses, which they call cottages, would be very likely to take offence at being called "cotters." The Log Cabin is an excellent name, and a pure Americanism, but it is confined in its meaning. Cottage has a charmingly sweet sound, and is, perhaps, more suggestive of comfortable thoughts than any other word in our language, but that of home.

"—If to my Cottage thou wilt resort,
So as I can will I thee comfort."

says Spenser in his Shepherd's Calendar
vol. II. 3

Stafford says, in Shakspeare's King Henry VI.

"Rebellious hinds, the filth and scum of Kent,
Marked for the gallows, lay your weapons down—
Home to your *Cottages*."

And Camillo, in the "Winter's Tale," "I have heard, Sir, of such a man, who hath a daughter of most rare note; the report of her is extended more than be thought to begin from such a *Cottage*." And Portia's speech is as well known and often quoted as any old proverb. "If to do, were as easy as to know what were good to do, chapels had been churches and *poor men's Cottages*, princes palaces."

"Ev'n humble Hartings' *cottaged* vale,
Shall learn the sad repeated tale,
And bid her shepherds weep."

says Collins, in his ode on the death of Col. Ross.

"Resolve we why the *Cottager* and King,
He whom sea-severed realms obey, and he
Who steals his own dominions from the waste.
Repelling winter blasts with mud and straw,
Disquieted alike, draw sigh for sigh,
In fate so distant, in complaint so near."

says Young, in his Complaint. And so through all English literature, the term cottage is confined to the residence of a poor rustic. To violently pervert to other uses one of the sweetest words in our homely language, and thus destroy its meaning, is a profanation that we cannot sanction; and until some better term can be invented for the country residence of the man of business, we shall, from sheer necessity, have to continue the use of the term Villa, although with an awkward feeling that we are employing a word to perform a duty which it has no right to do. But we have less affection for the Latin than for the English, and would sooner do violence to a dead, than a living language. Notwithstanding that Gwilt authoritatively prescribes the dimensions of a dwelling which may be called a Villa, as neither Pliny, Cicero, Columella, nor Vitruvius, who are the authors from whom our knowledge of the Villa is derived, makes any mention of the specific number of feet which a Villa should cover, we may be allowed to accept the word in its common meaning and apply it to the country residence of a town gentleman. The three kinds of Villas among the Romans were the Villa-rustica, which corresponded with our farm house, the Villa-fructuaria, which sometimes formed a part of the Villa-rustica, and the Villa-urbana, or pseudo-urbana, which is the type of what we, for lack of a better name, denominate the Villa. None but a public building should be called a Hall. There is some propriety in calling the mansion of an English 'Squire, a Hall, because it is the residence of the great man of the County, who is generally a Magistrate, and his house is, in fact, a public building. The slaves of the South generally call the residence of their master, the Great House, to distinguish it from all others of which they know anything, for the same reason that the tenants of an English landholder call their landlord's home the Hall. Castle, with us, is never applied to a private residence, but only to a large fortification. In Ireland they call very ordinary houses castles. Palace, is reserved for the residence of a royal personage solely.

Although we have a variety of designations for country residences, there are no distinctive names to distinguish the grand city residences of wealthy merchants from the poorest and most contracted houses of the poorer classes. They are all houses, and, great as the difference is between them, they all pass by the same name. It is different in the country, and in small villages, where there are Cottages and Villas.

The graceful custom of giving a distinct name to country seats and Cottages, we are happy to see, is becoming as common here as it is in England. A place in the country, though it be ever so small, seems to derive a new charm from being called by a name of its own, either after some natural peculiarity of the soil, or some event connected with the history of the owner, or some local tradition.

In a sparsely settled country, the owner's own name may be sufficient to designate his home by, as there is not the same danger of confusion from having two neighbors of the same family name; although even in such cases it would be better to give a country seat or farm, a particular name, because removals are so common that the place that might to-day be known as Smith's, would to-morrow be called Brown's, or Thompson's. There are many places in England which have become classical, that would be unknown if they were called after the names of their occupants. "Strawberry Hill," "The Leasowes," "Font Hill," "Charlecote Hall," "Abbotsford," "Penshurst," and hundreds of other names of English houses, are as familiar to Americans as "Mount Vernon," "The Hermitage," or "Ashland." The residences of our southern statesmen are known by their appellations, while those of our northern men of eminence are undistinguished by peculiar designations. The Hermitage is known as the residence of President Jackson, but the fine old mansion of the sage of Quincy, is only known as Mr. Adams' house. It may next year be called Mr. Williams', and the historic interest which attaches to it from having been the residence of a philosopher and a statesman, would be in a degree destroyed. Mr. Webster has a noble country seat in Massachusetts, which might become famous in history if it had a name of its own, but as Mr. Webster's house it will hardly be known beyond the neighborhood in which it is situated.

Names of country seats should have a local significance, or at least they should be peculiar. The English are fond of preserving their old Saxon names, and many of their old parks and halls are called by names which, to us have a very homely sound. But they are infinitely better than fancy names which always savor of affectation. It would hardly be possible to find an acre of land which did not possess some peculiarity from which a significant and peculiar name might be formed. People often bestow sweet-sounding names upon their places, without thinking of their appropriateness. Thus, we have seen, "Rose hills," which could make no boast of roses; "Brieries," which were not briery; "Bellevues," without views of any kind, and "Willow-brooks," destitute of both brooks and willows.

There are an infinite variety of natural objects, the names of which have never been employed for such purposes, that might with great propriety be applied to country seats, so that no one need tax his imagination very heavily to invent a distinctive appellation for his house. But this is something which

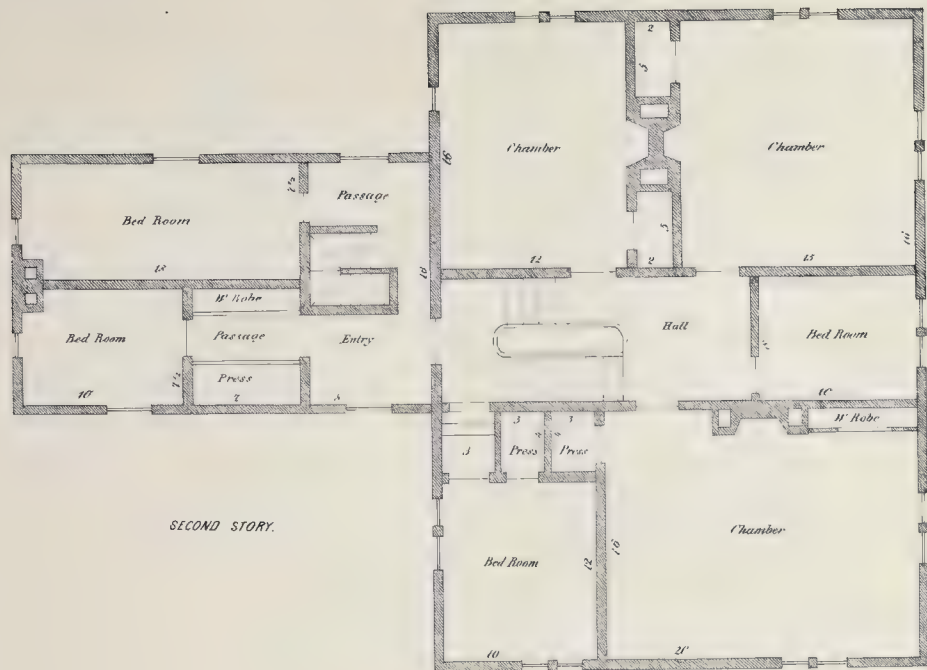
must be left to private taste. There is no law but that of taste to prevent a gentleman calling his country seat "The Elms," or "Rose Hill," or "Willow Brook," notwithstanding that they have already been used for such purposes some thousands of times. There is no patent for names. The Indian traditions of the country might furnish some novel and fine-sounding names for the country seats in the neighborhood of our cities, where it is more difficult than in the newly settled parts of our country to apply a name without taking one that has already been appropriated. It is very singular that while the changes have been so often rung upon "The Oaks," "The Pines," "The Cedars," and "the Willows," no one has thought of using the name of such indigenous trees as the Persimmon, the Pepperidge and the Locust. Mr. Van Buren has called his place after the Linden, which is a very beautiful tree, but not a native. The poplar has never been popular among names. A class of names has been very popular for country houses, which have a moral sense, and imply some peculiarity of feeling in the original proprietor; as, "Fame's Retreat," "Wiston's Rest," "Morton's Hope," &c. Such names are objectionable, because they are always adapted to the circumstances of the resident. "Morton's Hope," might become "Jones' Despair;" "Fame's Retreat," might be converted into a house of call, and "Wiston's Rest," anything but a rest to somebody else. But a "Sunny Side," would always be sunny, a "Green Bank," would always be green, and a "Flat Lands," always flat.

But this disquisition on the naming of places is not, strictly speaking, a part of our business, which is to give the designs for houses, and not furnish them with names.

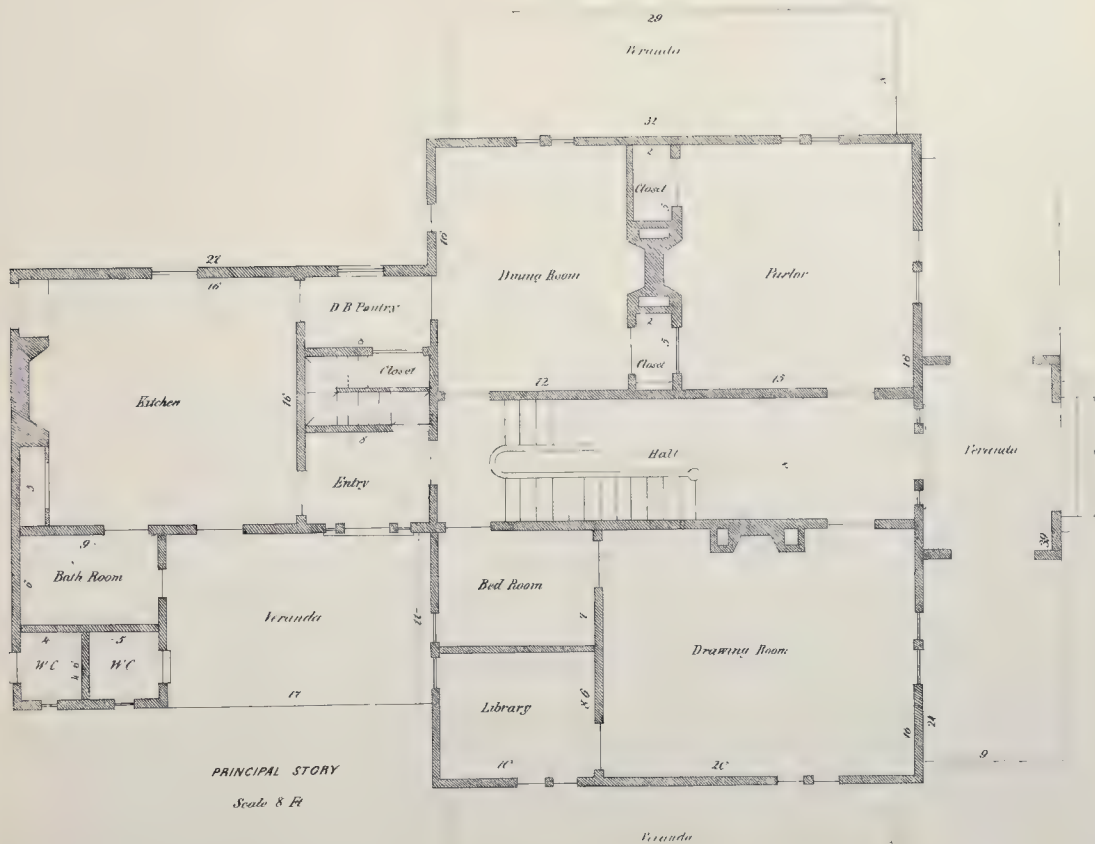
Three of the designs in this No. are purely American in character; Design XXVIII. is for a farm house of the first class; it has all the conveniences and requirements of a farmer's dwelling, with something of the elegancies of the Villa, and corresponds to the Italian, or Roman, Villa-rustica in design, although not in external appearance.

The other two designs in this Number, of a similar character, are of a more humble order. they are well adapted for gardeners or small farmers, or for rustic residences of any kind. Design XXIX. with the projecting eaves, supported by undressed pillars, would be greatly improved, and present a truly elegant appearance with some kind of trailing vines, honey suckles, or climbing roses, trained up the rude posts. In truth, flowering shrubs and vines are the natural ornament of all rustic houses.

Design XXVII. is for a suburban residence, in which the style of ornamentation is borrowed from the Persian. The lattice work, pointed arches, and slender shafts of the columns impart to the whole structure a light, cool, and cheerful aspect, without at all impairing that necessary effect of solidity and comfort which is well preserved by the compact form of the building, and the twisted chimneys. The climate of Persia so nearly resembles our own, that many valuable hints may be derived from studying the domestic Architecture of the country, which, with all its "barbaric splendor," contains much that may be profitably naturalized on our own soil.



SECOND STORY.



PRINCIPAL STORY

Scale 8 ft



PRINCIPAL FRONT.

Villa of the Pisoni-Moh



LAWN FRONT.

HOUSE

MAIN

Chimney 8 ft.
Second Story 11 ft.
Principal Floor 11 ft.
Cellar 6 ft.



PRINCIPAL ELEVATION.

WING

Chimney 8 ft.
Second Story 8 ft. 6 in.
First Story 9 ft.
Cellar 6 ft.



FLANK ELEVATION.



COTTAGE IN RUSTIC STYLE.

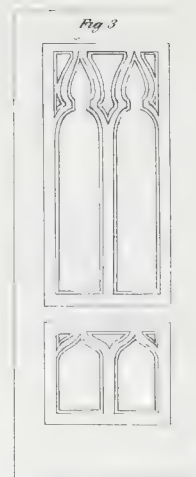
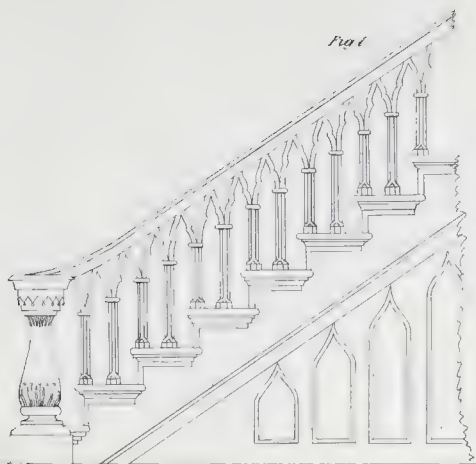


Designed & Drawn by Wm. H. Russell

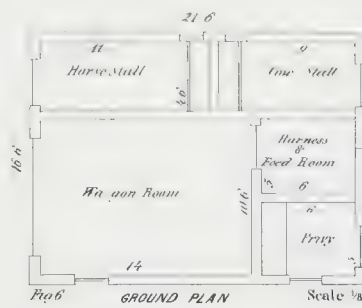
Master A. B. H. I. D. C. W. H. H. N. Y.

BRACKETED COTTAGE

English Style.



SIDE ELEVATION.

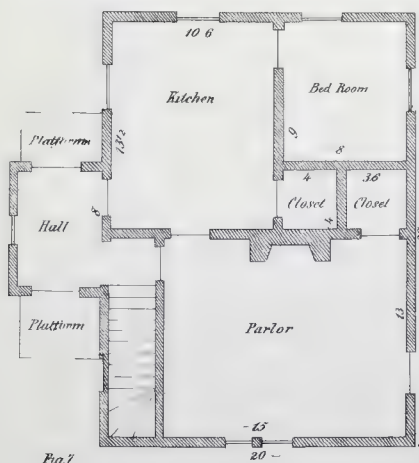


GROUND PLAN

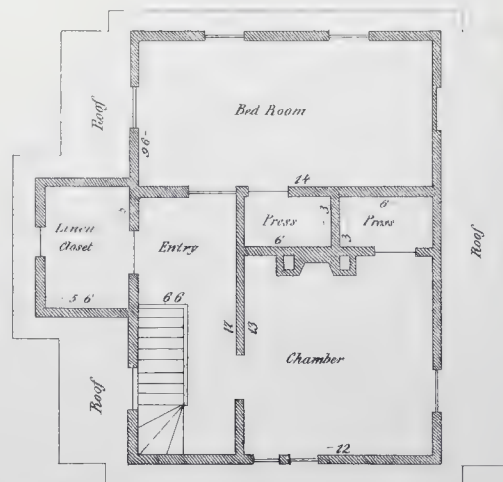


ENTRANCE ELEVATION.

DESIGN XXIX & XXX.



FIRST STORY.



CHAMBER STORY.

Scale 1/2

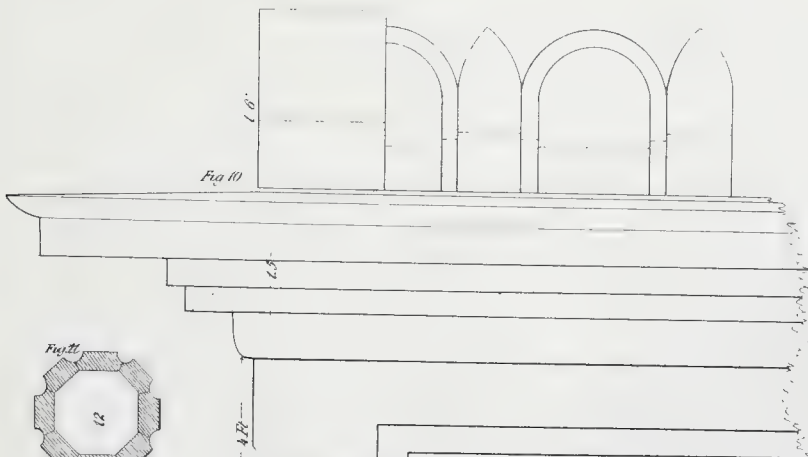
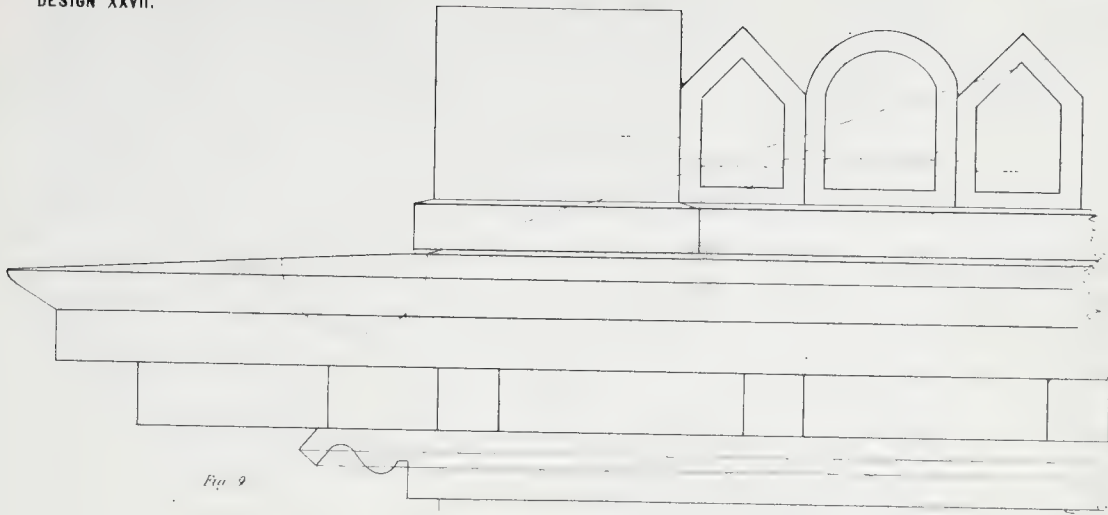
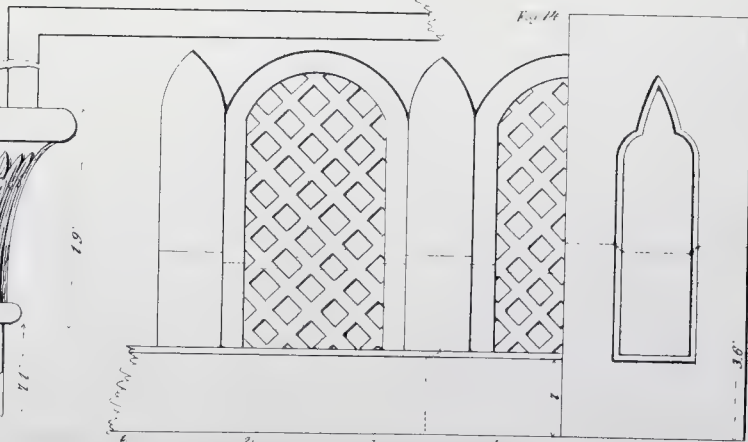
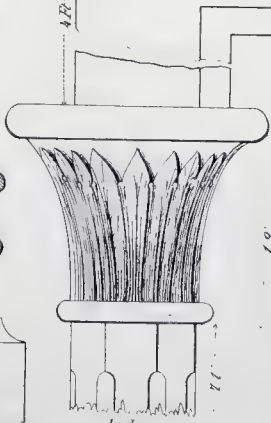
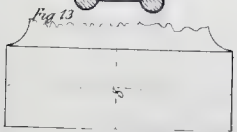
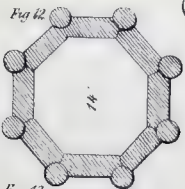


Fig. 13



Scale

SPECIFICATIONS

Of the Materials and Labor required in the erection of Design XXVII.

MASON'S BILL.....Excavations made for the cellar (under main house and wing), cistern and sink.....cellar 4 feet in the ground and 3 feet out.....sink 9 feet, and cistern 10 feet deep.....the surface graded on a descent of 1 inch to the foot.....Cellar walls of bank stone, 18 inches thick, laid in coarse mortar.....Foundations of stone to the chimneys and piers.....Sink wall 18 inches thick, laid in hydraulic cement.....Kitchen hearth, 3 by 8, cellar steps, 10 in. wide, 4 ft. long.....cellar door and window sills, and cistern neck, all of blue stone.....Three polished blue stone hearths in second story.....brown stone caps to chimneys. *Brick Work*.....Three chimneys with 7 fire places, the flues of each plastered and topped out 8 feet above the gutters, the shafts above the base cemented to the stone cap. Seven 8 in. piers in the cellar, to support the partitions, and 1-4 piers, 8 by 16 in., to support the columns.....all the exterior walls of wood, to be filled in with brick set on the edge, and secured by wood braches.....The cistern built with brick, 9 feet deep and 8 feet diameter.....8 inch wall, the top arched, 12 in. bottom.....the inside cemented 2 coats and washed. On back and side, and two round masonry walls in first story of main house.....*Plastering*.....All the walls and ceilings in main house and wing to be lathed and plastered two coats of brown mortar and hard finished.....the cellar ceiling one heavy coat of brown, and white washed two coats.....the cellar walls to have two coats of white wash.....Plaster cornices in three principal rooms and hall.....all the mortar to be made with Thomaston lime three parts, and one part of sharp bank sand.....the cement on, and two parts sand

CARPENTER'S BILL.....The frame of sound, seasoned, sawed pine timber, substantially framed and braced. The sills, posts, framing beams and purlins, 4 by 10.....cistern and gate, 4 by 7.....first and second tier of beams, 3 by 10, 16 inches between centers.....roof tiers, 3 by 8, 6 feet between centers.....rafters, 3 by 8, 3 by 7, and 3 by 6, 3 feet between centers.....girders in cellar, 6 by 8. *Veranda*.....Sills, plates and bearers 3 by 8.....rafters, 3 by 9.....purlins, 2 by 9.....door and window studs, 4 by 6.....all others 3 by 4, 16 inches between centers.....sides covered with milled plank, strongly secured to the frame, and overlaid with 5/8 narrow clear pine siding, planed and stained, and put on with 2d nails. corner boards and water table of 2 inch plank. Roofs of main house and wing covered with Snyder's patent galvanized anneal iron plates, laid with ridge joints, on milled plank.....veranda roof laid with narrow, clear, seasoned white pine plank, planed both sides and grooved.....sills put on with white lead and blind nailed.....the cornices all to be made of clear seasoned pine, put together with white lead purlins, and

rafters of verandas planed and beaded.....all the cornices, columns, ante, balustrades and filling under the verandas, to be the same as drawn in detail in Plate 18.....Ladders of the same materials as the roof, 3 in. diameter for the main house, and 2 in. for the wing and verandas. Floors.....Of the interior, of white pine milled plank, secured by three, 1 2d. nails to each beam.....Veranda floor of narrow, clear, pine plank, tongued and grooved, the joints filled with white lead, and blind nailed. Windows.....Seven double windows, the sashes 2 in. thick, 2 panels at the bottom, the upper part filled with glass, and hung by Parliament hinges, and secured to the mullions by French lock latches with porcelain knobs.....8 double windows in second story, sashes, 1 3-4 in. thick, the frames made with mullions.....4 windows in first story of wing, and five in the second story.....the sashes to fold.....all other windows single sashes, 1 3-4 thick, hung by 3 by 3 butts.....French lock latches, with mineral knobs, to the single windows, and French grip bolts to the folding sashes.....all the sashes to be filled with good strong glass, clear of defects, and set in diamond form.....6 windows in the cellar, 9 lights, 9 by 12.....moving blinds, moulded both sides, hung by strong hinges, and secured by bolts and patent fastenings. Doors.....Front door to have head and side lights, and the side door to have a head light.....passage door in first story to be 1 3-4 in. all others 1 1-2 in. thick, 4 panels, moulded on both sides, as in Plate 17, Fig. 3.....doors and windows in first story trimmed with double faced moulded architraves, 5 in. wide and 2 in. thick.....in second story, single moulded, 5 in. wide, 1 1-2 in. thick.....doors all hung by broad butts, and secured by 4 1-2 in. mortice locks to the 1 3-4 in doors, and 3 1-2 in. mortice to all others.....Porcelain lock furniture to the doors in first story, and mineral knobs to the second story. Base, in first and second stories of main house, 1 1-4 in. thick, 7 1-2 in high, moulded.....in wing, 1 inch thick, 8 in. high. Stairs, from first to second story, made and put up strong, as in detail drawing.....See Plate 17, Fig. 1.....The rail of best seasoned curled maple, polished.....the baluster filling, newel, string and panel work of seasoned white pine.....Back stairs enclosed with plastered partition one side, and narrow plank beaded both sides on the other.....All the ceilings to be cross furred with 1 in. hemlock strips, 1 2 in. between centers.....heights of ceiling in main house, first story, 11 ft., second story, 10 ft.....in wing, first story, 9 ft., second story 8 ft. 6 in. Closets and Dressers, to have suitable shelves, hooks, and pins.....Three wooden mantles in second story, put up strong.....borders to all the hearths.....Bells to the front door, and three rooms each in first and second stories, the pull of each to correspond with lock furniture. Painting.....The blinds to have 3 coats best lead and oil paint, mixed with French green.....the stair rail to be varnished 5 coats, and polished.....all other wood work, except interior floors, to have two coats of pure lead and linseed oil, put on in dry weather.....the last coat, may be shaded a pearl gray or drab color.....for the drab, take chrome yellow and lamp black.....and for the pearl gray, Prussian blue and lamp black.....grind them in oil separately and mix the shade required!

DESCRIPTION OF THE PLATES.

PLATE 13.—Ground plan of the first and second stories of Designs XXVII. and XXVIII.

PLATE 14.—Design XXVII. Geometrical elevations of the principal and Lawn fronts of a Persian Villa. This design was made for N. P. H. Barrett, Esq., of Staten Island; the site on which it is to be erected is one of the most beautiful in the neighborhood of New York—Clove-Wood Hill—a short distance from the landing at Port Richmond. The style of the building admirably harmonizes with the scenery, which has an aspect of beauty and cheerfulness rarely equalled. The view from Clove Wood Hill is remarkably fine, embracing some of the prettiest villages, and most beautiful Villas in the country, and the Villa itself will be a conspicuous object in the scene of which it makes a part.

PLATE 15.—Design XXVIII. Two geometrical elevations of a Villa, to be constructed in a plain and substantial manner, on a few acres of land in a small country village. The style of architecture is mixed; its simplicity conveys the expression of a comfortable, convenient, and graceful dwelling. The principal detail in the construction to be the same as for Design XXVII. The roof of main house and wing covered with shingles; the window sashes with square panes, and to slide up and down by cord and weights.

PLATE 16.—Design XXIX. Perspective view of a substantial Cottage in the Rustic Style—constructed of rude materials. Cellar, 6 feet deep, with stone walls; chimney with two fire-places; rooms lathed and plastered; windows with square panes of glass; sashes to slide up and down by cord and weights; rough board sides, the joints feather-edged and lapped; the roof covered with boards same as sides and overlaid with bark slips 2 feet 6 in. long, 8 to 10 in. wide, the ends rounded and laid 12 in. to weather; the supports to the eaves and brackets, trunks of trees with the bark on; the uprights set on stone plinths; the exterior painted (except the roof, uprights and brackets) one good coat of white lead and oil, straw color; the interior, except floor, two coats of drab color. The merits of this cottage are its simple, cheap, comfortable and humble appearance, easily constructed, and suited to any location.

Design XXX.—Perspective view of a Cottage in the Bracketed Style. This cottage has a pleasing effect in the unity of its style and composition; it is picturesque and marked, and has the appearance of something more than a "cheap-living" house. The construction is in the usual manner—a good cellar; chimney with two fire-places; hard finished plastered walls; casement windows; the sides covered with clear 9 inch boards, planed and rebated; the roof, with cedar shingles, the ends rounded; sides, trimmings, and interior work painted two coats.

PLATE 17.—Details for Design XXVII. Fig. 1. Side section of the principal stairs. Fig. 2. Design of the window sashes; and Fig. 3. Design for the doors. Figs. 4, 5 and 6. Two elevations and ground plan for a small barn, with all the necessary room for a wagon, horse, cow, feed-room and privy. Fig. 7 and 8. Ground plans of first and second stories, for Designs XXIX. and XXX.

PLATE 18.—Details for Design XXVII. Fig. 9. Face section of the main cornice. Fig. 10. Face section and cap of the column of veranda. Figs. 11 and 12. Top and bottom sections of the shafts for the columns; and Fig. 13. The base. Fig. 14. Face section of the porch parapet. Fig. 15. Veranda pillar.

ESTIMATE

Of the Materials and Labor required in the erection of Design XXVII.

| | | | | | |
|---|--------|----------|--|-------|--------|
| 296 cubic yds. excavation, - - - | 9 | \$26 64 | 18 steps and risers, principal stairs, - | 3 50 | 63 00 |
| 2538 cubic ft. stone work, - - - | 10 | 253 80 | 2 front doors, with side and head lights, - | 30 00 | 60 00 |
| 7 stone sills - - - - - | 50 | 3 50 | 11 doors in principal story, - - - | 11 00 | 121 00 |
| 24 lineal ft. steps, - - - - - | 14 | 3 36 | 10 " second " - - - - - | 8 00 | 80 00 |
| Cistern work, \$3 50; 4 hearths, - - | 3 00 | 15 50 | 10 " wing - - - - - | 7 00 | 70 00 |
| 1 marble mantle, \$50; 2 veined mantles, - | 25 00 | 100 00 | 7 double windows, first story, - - - | 14 00 | 98 00 |
| 2 brown stone chimney caps, - - - | 14 00 | 28 00 | 8 " " second story, - - - | 10 00 | 80 00 |
| 1451 super. yds. plastering, - - - | 26 | 377 26 | 7 " " wing, - - - - - | 9 00 | 63 00 |
| 36500 brick, in chim., piers, filling and cistern, 9½ | 346 75 | 8 single | " " - - - - - | 6 50 | 52 00 |
| 268 lineal ft. cornice, - - - - - | 24 | 64 32 | 6 cellar " - - - - - | 2 50 | 15 00 |
| 16196 ft. timber, in frame, per h. - | 2 00 | 323 92 | 3 wood mantles, \$4 50; 7 bells, - | 3 25 | 36 25 |
| 174 joist, set in frame and partitions, - | 18 | 55 32 | 400 super. yds. tight furring, - - | 7 | 28 00 |
| 1782 super. ft. of sheathing and siding, - | 7 | 334 74 | 197 lin. ft. of blinds, - - - - - | 80 | 157 68 |
| 2283 " " " and iron roof, - - - | 16½ | 376 70 | 1152 lin. ft. of base, - - - - - | 4 | 46 00 |
| 40 lin. ft. 3 in. leader, 12½c.; 114 ft. - | 11 | 20 04 | 12 closets—to shelve and put in hooks, - | 4 50 | 54 00 |
| 1485 super. ft. of interior floor, - - | 4 | 139 40 | 1000 lb. white lead in oil, per h. - | 7 00 | 70 00 |
| .002 " " veranda " - - - - - | 8 | 80 16 | 43 galls. linseed oil, - - - - - | 80 | 34 40 |
| 1184 " " " roof, - - - - - | 9 | 106 56 | 4 " boiled linseed oil, - - - - - | 90 | 3 60 |
| 172 lin. ft. main cornice, - - - - - | 85 | 146 20 | 5 " spirits turpentine, - - - - - | 50 | 2 50 |
| 13 " " wing " - - - - - | 70 | 58 10 | ½ " varnish, - - - - - | 4 00 | 2 00 |
| 199 " " veranda " - - - - - | 55 | 109 15 | 30 lbs. putty, 4c.; 10 lb. litharge, - | 6 | 1 80 |
| 15 veranda columns, \$10 50; 3 antæ, - | 3 00 | 166 50 | 3 lbs. glue, 20c.; 2 lb. lampblack in oil, - | 40 | 1 40 |
| 164 ft. veranda cornice and filling, - | 14 | 22 96 | 6 lb. chrome yellow in oil, - - - | 30 | 1 80 |
| 15 steps and rises—back stairs, - - | 1 00 | 15 00 | 60 days painter's labor, - - - - | 1 75 | 105 00 |

Cottage.—Design XXX.

| | | | |
|--------------------------------------|--------|--|-------|
| 33 yds. excavation, 9c. - - - - - | 77 75 | 4 cellar windows, \$2 50, - - - - | 10 00 |
| 364 feet stone, 9c. - - - - - | 77 76 | 14 doors, \$6, - - - - - | 84 00 |
| 171 yds. plastering, 25c. - - - - - | 117 75 | 1218 feet floor, 3½, - - - - - | 42 63 |
| 5500 brick, - - - - - | 55 00 | 312 feet base, 3½, - - - - - | 10 92 |
| 2 stone hearths, - - - - - | 6 00 | 2 mantles, \$2 50, - - - - - | 5 00 |
| 3222 feet timber, \$2 per h. - - - - | 64 44 | 300 lbs. lead, \$7, - - - - - | 21 00 |
| 154 joist, 18c. - - - - - | 27 72 | 16 gallons oil, 80c. - - - - - | 12 80 |
| 1229 feet roof, 9c. - - - - - | 110 61 | 2 " spirits turpentine, 50c. - - - | 1 00 |
| 1728 feet siding, 4c. - - - - - | 69 12 | 10 lbs. putty, 4c.; 2 lbs. litharge, 6c. - | 52 |
| 2 double windows, \$11, - - - - - | 22 00 | 1 lb. glue, - - - - - | 25 |
| 5 single " \$7 50, - - - - - | 37 50 | 20 days painter's labor, \$1 75, - | 34 00 |
| 7 " " \$6 50, - - - - - | 45 50 | | |

| | |
|-----------------------------------|------------|
| Design XXVII. will cost - | \$4,451 00 |
| Design XXVIII. will cost - | \$3,500 00 |
| Design XXIX. will cost - | \$650 00 |
| Design XXX. will cost - | \$860 00 |
| Barn, in Plate 17, Figs. 4, 5, 6, | \$250 00 |

VENETIAN ARCHITECTURE.

WE have often had occasion to observe the instinctive choice which the people inhabiting the different parts of our widely extended Union, make of the architectural forms of the old world which most nearly assimilate to their habits, and the requirements of the climate. We thus see that in all the vagaries of architecture indulged in by the people in the neighborhood of New York—the Baronial Castles, Chinese pagodas and Greek temples—that the prevailing form, or dominant tone, is very similar to the light, graceful and voluptuous architecture of Italy, but more particularly of the Venetian school, which is distinguished by its profusion of columns, arches, verandas, and pilasters. The most eminent architects of modern times were Venetians. The Venetian school of architecture has been compared with the Venetian school of painting because it seems to address itself more to the eye and less to the passions than the other schools of Italy. But the cause assigned we consider unjust, although the comparison is undoubtedly true. There is certainly not less passion or thought in the works of Titian and his followers because of the richness and truth of their coloring, nor less of beauty and convenience in the works of San Micheli, Palladio and Sansovino, because of their obvious elegance and luxury. The length of time which they have continued in existence, and their reproduction in this country by our mercantile aristocracy, inhabiting a climate similar to their own, prove the truth and adaptedness of the architecture of the Venetians. And it is not a little remarkable too, that our painters more nearly resemble the school of Titian than that of any other. Our artists are, beyond dispute, superior, as colorists to those of any part of Europe, and the works of our great portrait painter, Page, approach nearer to the pictures of Titian than those of any artist who has flourished since the time of the great Venetian painter.

Inigo Jones, the greatest of English architects, who was a disciple of Palladio, introduced the Venetian school of architecture into England, but it is ill adapted to that cold and humid climate, and uncongenial to the character of the people. It is too light and elegant for beer-drinking, saturnine John Bull, whose house must be “heavy-wet,” like his favorite drink, dark looking, silent and dull. There is too much open airiness about the arcades of the Venetian school of architecture either for the climate or social habits of England. San Micheli, who was born in the year 1484, was the founder of the Venetian school of architecture, and was one of the greatest masters of his art that Italy produced; he designed a greater number of works than any other architect who ever lived, many of which still remain as monuments of his genius, and died in 1549. Sansovino who was cotemporary with San Micheli, was born at Florence, but he followed the Venetian School. Sansovino was held in so great esteem by his adopted city of Venice,

that on a particular occasion when it became necessary to raise a large sum of money for state purposes, by taxing the citizens, he and Titian were the only ones who were exempted from taxation, by a special decree of the Senate. The last great Venetian Architect was Vincenzo Scamozzi, who was the son of an architect. Scamozzi published a work on architecture and died in 1616. The Venetian school has been naturalized in all parts of Europe, because its elements admit of a more convenient arrangement for domestic purposes than any other; it grew out of the demands of a society consisting of merchant princes. The State of Venice, like our own, formed a democracy that demanded no stupendous monuments of regal pride, but an infinite number of elegant and comfortable houses for the residences of the wealthy families who composed the ruling classes of the State. We are more republican and more democratic than the Venetians; wealth is more diffused with us, there is a greater equality of condition with us, and we have no powerful families; the only power that we acknowledge being that of talent. Hence our architectural wants are much more moderate than were those of the Venetians; and while our houses abound in as many conveniences and elegancies, they are but dwindled specimens in point of magnitude and splendor, when compared with the palaces of the Venetian families. While they built of marble and porphyry, we build of brick, wood, or granite; and as, with us, a man rarely dies in the house in which he was born, elegance and comfort are more studied in our domestic structures than grandeur and durability.

The three designs for Villas contained in the present number of our work, are all Venetian in character, and are admirably adapted to the habits of our people and the exigencies of our climate. It has been said that the taste of Palladio was tempered by the care he bestowed on accommodating exterior beauty to interior convenience, and by suiting the art to the wants of persons with moderate means, through the medium of greatness without great dimensions, and richness of effect without great outlay.

This brief apology for Palladio is the highest eulogium that can be pronounced upon a modern architect, and we have aimed in all our designs to deserve such an encomium. The plans in the present number of our work have been designed with such views; the larger Design, No. XXXI., is for a bracketed Villa, of wood, and with its open verandas, projecting eaves, circular headed windows, and balconies, though extremely simple in details, forms a *tout ensemble* of unusual elegance and lightness. It is intended for a large family, and abounds in all the luxurious contrivances which the present refined state of our society demands; the rooms are spacious, the stairways broad, and the hall, which extends through the centre of the house, is wide and lofty. A Villa like this is well adapted for the vicinity of our large cities; it is imposing in appearance without being ponderous or costly. The other two Designs are in the same style, but of smaller dimensions, and adapted to the wants of smaller families. Although they present the view of wooden buildings, the plans and specifications are for brick. No. XXXIII. has a peculiarly novel and elegant effect from the position of the Campanile tower, which always projects from the main building, let it be viewed from which ever point it may.



WALDWIC COTTAGE.

"WALDWIC" is a Saxon word which means *beautiful grave*, and it has been most appropriately bestowed upon the Cottage of which we have a fine engraved representation. Waldwic Cottage is one of the few remaining houses in the country which have been consecrated by historical events. It was once, in ante-revolutionary times, the residence of a wealthy English family, and during the war was at different times the stopping-place, or head quarters of WASHINGTON, and the residence of the beautiful Theodosia Prevost, who afterwards became renowned as the wife of Aaron Burr. At that time it was called the Little Hermitage, and many of her letters to Burr were dated here. It was while residing here that she first became acquainted with Burr, who was then stationed at Ramapo, not far distant. Davis, in his Life of Burr, says, "The house of Mrs. Prevost was the resort of the most accomplished officers in the American army when they were in the vicinity of it." Col. Munroe, in a letter to Mrs. Prevost, says that the lady Col. C—— had promised him to make a visit to the "Little Hermitage;" and the house is frequently alluded to by other persons whose letters have been preserved in the Burr correspondence.

But the house possesses sufficient interest from its beautiful situation in one of the loveliest and most fertile spots in New Jersey, to entitle it to notice, apart from all historical associations. It is situated near Paramus, on the bank of the Hohokus river, about thirty miles from New York. It is surrounded by the loveliest scenery that can be formed by a combination of rivers, forests, and cultivated plains. On the east it is flanked by a noble grove of oaks, on the north by the primitive forest, on the west by the river on which are erected within view, a grist mill, two paper mills, and a cotton manufactory; on the south are the plains of Paramus and the valley of the Saddle river. Only a very small part of the original building, which was a substantial first class country house, now remains. The present owner of

Waldwic Cottage, for whom it was designed and rebuilt, and to whom we are indebted for his refined taste and liberality, in giving free scope to our designs in the construction of his Cottage, is ELIJAH ROSENCRANTZ, Esq. None but an architect, can fully appreciate the value of this acknowledgment, for there is no other profession whose members are so liable to annoyance and disappointment from the interference of their employers. Patients confidently put their lives into the hands of their physicians; clients trust their property to the management of their lawyers; parents confide the education of their children to teachers, and all trustingly resign the welfare of their souls into the keeping of their pastors; but when it comes to the construction of a house, the most difficult and complicate of all arts, the one which requires the most various learning and the clearest intellect, combined with natural talents for the business—then everybody feels competent to the task of giving advice, of making suggestions and altering the designs of the professional architect. As no one can have a greater interest in the cost and construction of a house than the man who is to pay for it and live in it, it is but right that it should conform to his tastes and means. But whoever employs an architect should first be satisfied of his capacity and honesty, and then having instructed him as to the kind of house desired, he should be left to execute the plans of his employer; for as none but fools judge of work before it is finished, no sensible man will attempt to make alterations in a house while it is in the process of construction, because no one but the architect who designed it can see the fitness of all its parts, until it is completed. Many a good design has been spoiled by the hasty alteration of the proprietor, and it may be set down as an infallible rule in building that any interference with the architect on the part of the employer, will always result in his loss and disappointment. If a gentleman chooses to spoil his house and waste his money, it is his own business, to be sure, but he has no right to injure the reputation of another person by mixing up his own crudities with the designs of the architect he employs, and who will have to bear the censure of any defects in the house which he may unjustly have the credit of constructing.

"Waldwic" forms probably as good an example of a complete and well constructed farm Cottage Villa, as the surrounding country can afford. The design of the house is after the Old English style, and it is finished inside and out in the most substantial manner: the walls are constructed of hammer-dressed brown stone, from extensive quarries in the vicinity, the timber of oak and chestnut, and the roof of cedar. The original house, like nearly all the old houses in this part of the country, had a piazza on the western front. Annexed is a cut of the Ground Plan.

DESCRIPTION OF THE PLAN.

A, Drawing room, 16 by 18, with a bay window 5 by 8. Parlor, 15 by 16—the two rooms both having entrances from the Veranda, M. C, Dining room, 16 by 18. D, Library, 9 by 13. E, Kitchen, 14 by 15. F, Dairy room, 11 by 15. G, Principal hall, 10 by 18. H, Entry, 8 by 14, having a marble basin. I, Kitchen pantry, 5 by 5. J, China closet. K, closets. L, Enclosed porch to the Library, 5 by 10. M, South veranda, 8 by 32. N, West veranda, 8 by 20. O, Principal porch. P, Wash and bake room, 10 by 13. Q, Kitchens, &c. 8 by 10. R R, Water closets, each 5 by 5. S, Passage from kitchen to wash-room. T, Shed over the river-water cisterns. U, Cellar stairs. The second story contains three chambers, three bed-rooms with bath and water closets, linen-room, and seven presses and closets. The attic contains three sleeping-rooms, each 8 by 18. A cellar under the whole house. The principal rooms are heated by Walker's improved furnace. Water is brought from the Hohokus river, a distance of 150 feet, to the attic of the house, a rise of 75 feet. It discharges in a tank at the rate of 500 gallons per day, and is distributed by pipes over the house and to the out-buildings.





ITALIAN VILLA

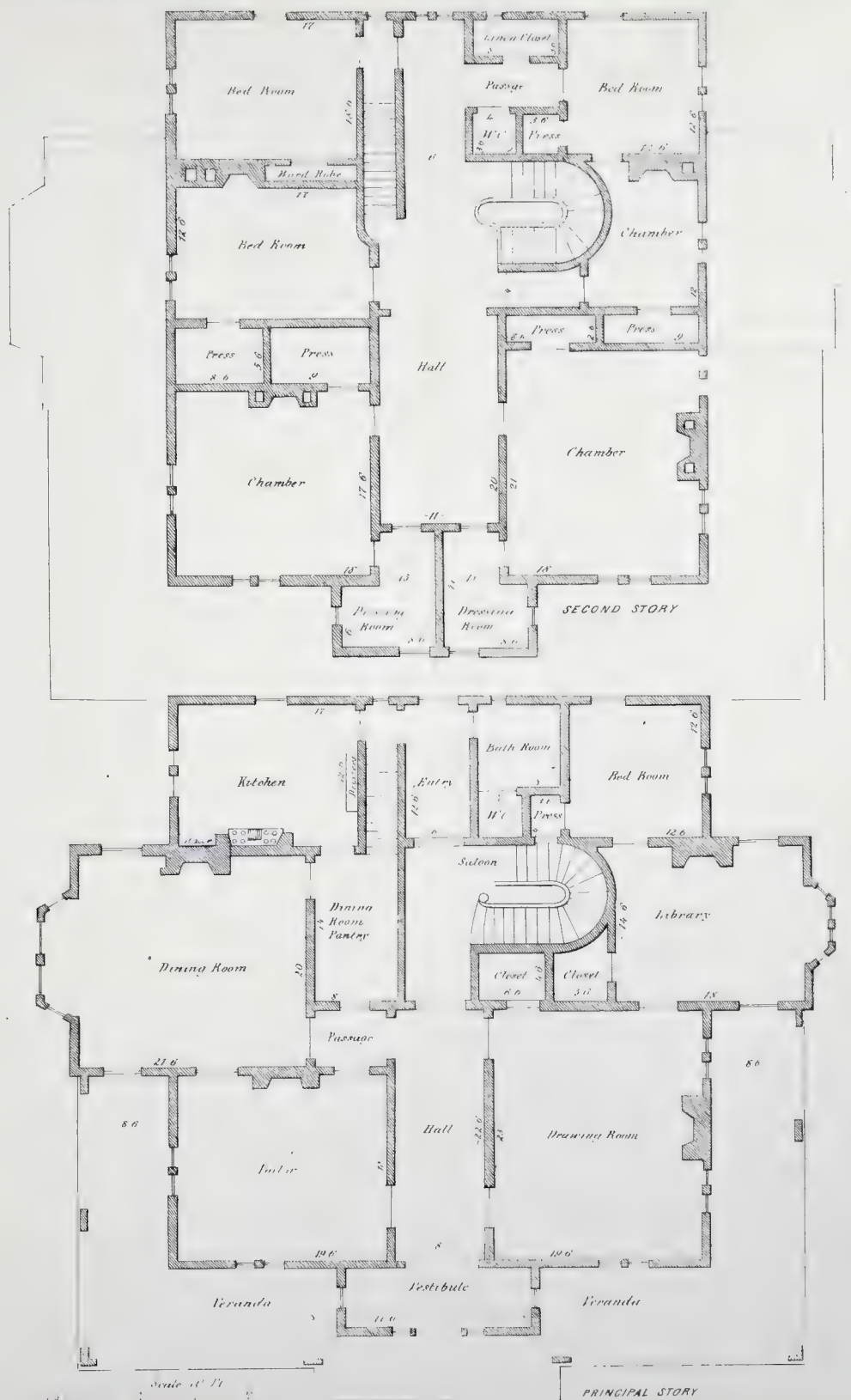
Italy, 1860.

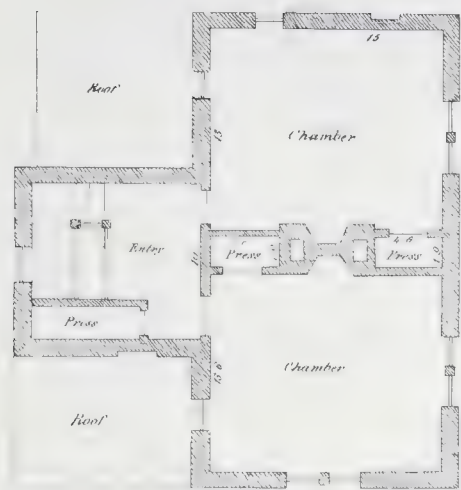


Designed & drawn by W. L. Bennett

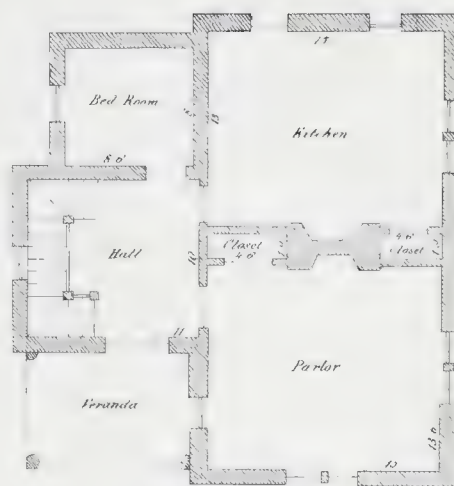
ENTRANCE FRONT.

MADE IN THE U.S.A.

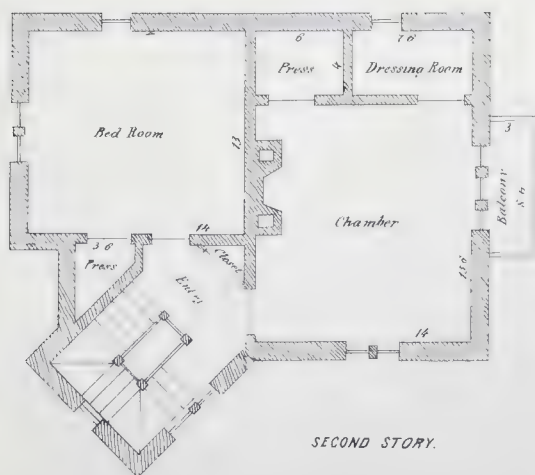




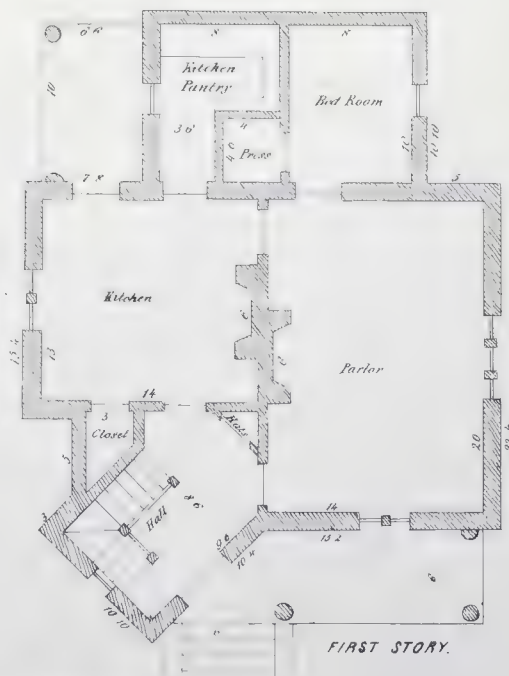
SECOND STORY



FIRST STORY.



SECOND STORY.



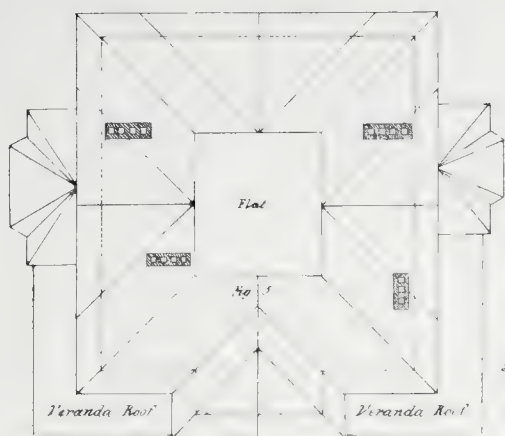
FIRST STORY.



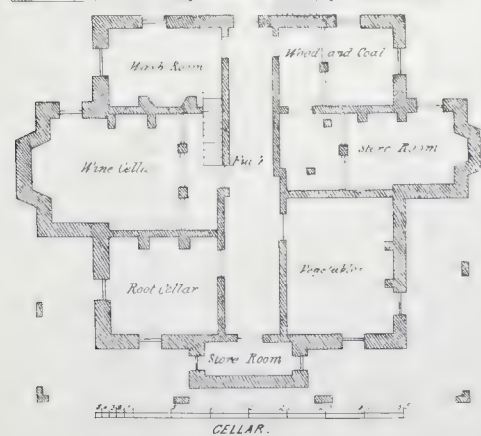
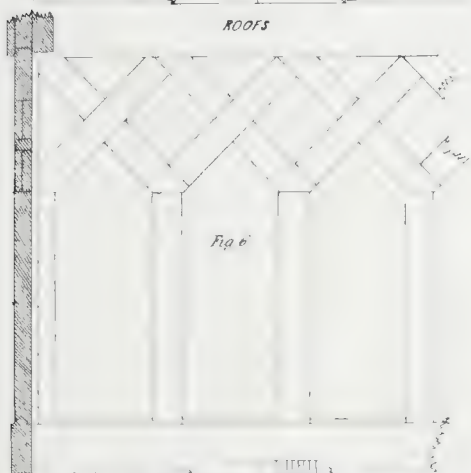
ITALIAN VILLA.



ITALIAN VILLA.



ROOFS



CELLAR.

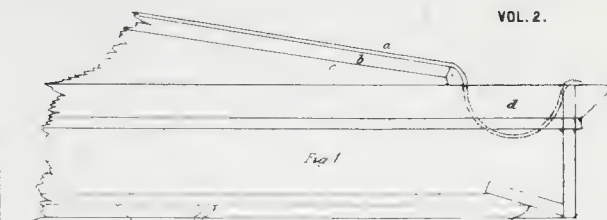


Fig 1

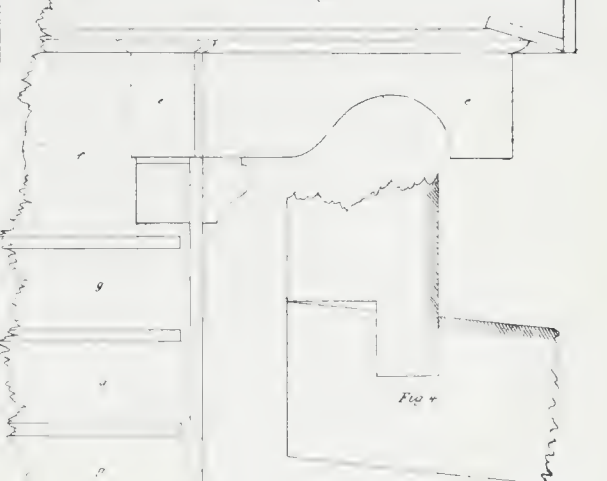


Fig 2

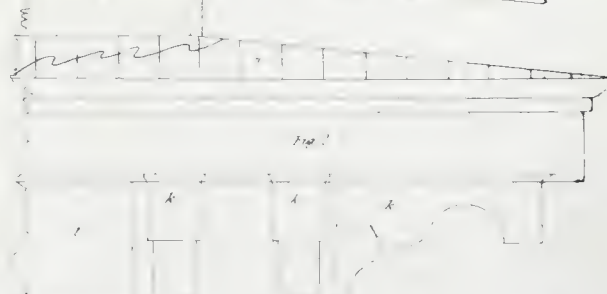
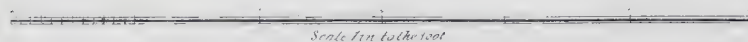


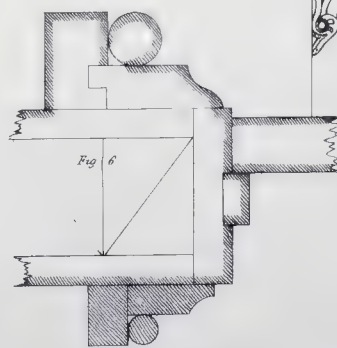
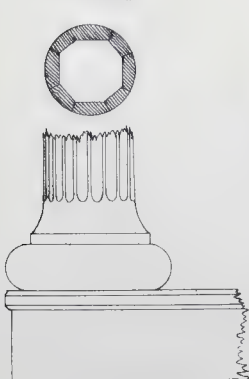
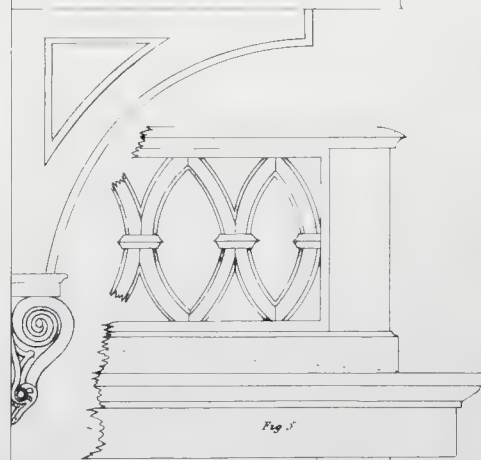
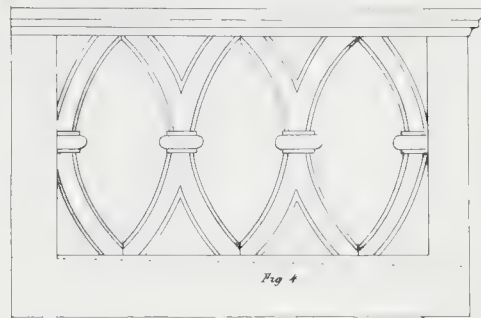
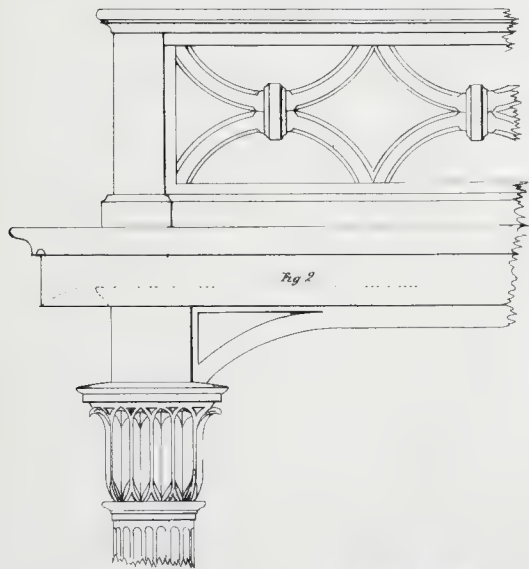
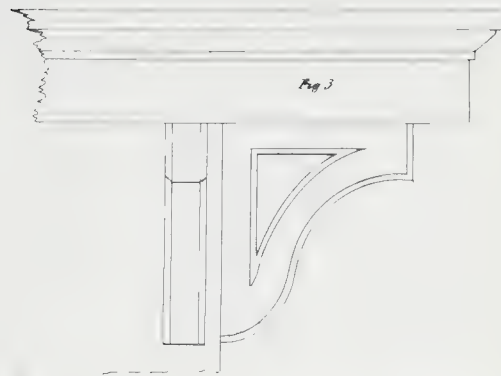
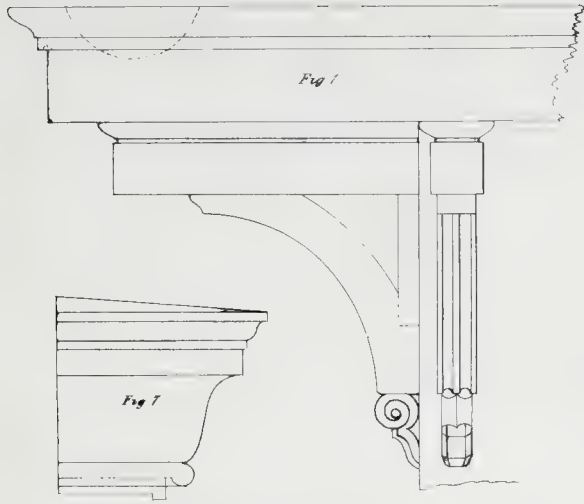
Fig 3



Fig 4



Scale for bath-tub



Scale 1/4 in

Of the Labor and Materials required in the Erection of Design XXXI.

CARPENTER'S BILL. Frame of mill cut timber, strongly framed and braced. sills, posts, plates and trimmer beams, & by 10, interiors & by 8, first and second story beams 3 by 10, 16 in. between centers bridged and disenged. 3 d tie p 3 by 8, 32 in. between centers. hip rafters 3 by 8. rafter rafters 3 by 12. all other rafters 3 by 8 and 3 by 6, set 32 inches between centers. Veranda sills, beams, plates, rafters and parlors 3 by 8. stalling 3 by 4, set 12 in. between centers, the partitions bridged. the house enclosed with 1 1/4 tongue and grooved and ribbed clear pine plank, put on with white lead in the joints. Main and veranda cornice, water, roofing, &c. same as in detail, Plate 23. The roof covered with best quality galvanized tinned iron plates, on milled plank. 3 in. leaders of the same. Windows in first and second stories all to have single and double circular heads. the sashes 1 1/2 in. thick, double hung, Belfast glass in first story, and Suranne in second. square 6 light windows in cellar, hung by butts. Venetian rolling blind, circular sun bows, mounted both sides, strongly hung and fastened, to first and second story windows. plain shutters in cellar. Doors 4 1/4 thick in first story, 8 panels, set in iron bolts. in second story, 1 1/2 thick, 4 panels, the top panel. set in iron bolts, mounted both sides. hung by 5 butts, in first story, and 4 by 4 in second story. cellar doors 1 1/4 thick, 4 panels. 5 in. mortice locks, with porcelain knobs, "gold marble" pattern, to 11 doors in first story, and 4 in. mortice locks, with white porcelain knobs, to 9 doors in first story, and all the doors in second story. 5 in. rim locks, with mineral knobs, to cellar doors. 5 1/2 by 3 in. moulded architraves, and projecting moulded caps to the doors and windows in first story, and 4 1/2 by 2 in. moulded architraves to the doors and windows in second story, moulded base 8 in. h., 1/2 in. thick in first story, and 1 1/2 in. in second story.

Veranda floor and roof, of narrow clear white pine plank, tongued and grooved, the joints filled with white lead and blind nailed.....interior floors of best quality pine milled plank, properly laid.....Principal stairs, from first to second story, made with curtail step, circular string, 6 in. moulded rail with scroll, 2 inch turned balusters and $\frac{1}{2}$ in. newel.....rail, balusters and newel, of seasoned St. Domingo wood.... private stairs and cellar stairs enclosed, with each a door at the top.....wood mantles to the fire places in second story, and borders to all the hearths.....closets and presses shelved, and to have a sufficient number of hooks and pins.....Six bells in first story, with gold marble porcelain pulls, $\frac{1}{2}$ in second story, with white porcelain.....First story 12 feet, second story 10 feet.....cellar 7 ft. 6 in. all in the clear when finished.

PAINTING......Two coats of pure white lead and linseed oil, put on at proper times, on all the wood work except interior floors, mahogany, and blinds.....the latter to have 3 coats of paint, the last to be a French green.....stair rail and balusters to be polished.

SPECIFICATIONS FOR DESIGN XXXII.

Excavations for walls and piers made.....Cellar walls 18 in. thick, 7 ft. 6 in. high... blue stone sills and lintels, steps and coping to the cellar.....brick piers, 8 by 12.....one chimney with 5 fire places, 3 of them for wood fire, 2 grates and one marble mantle.....Superstructure walls of smooth, hard brick, 12 inches thick, laid with close flush joints.....brown stone water table, plain tooled, 8 inches high.....cut brown stone sills and lintels to windows and doors in first and second stories.....brick walls in the two stories faced, and with the partitions, lathed and plastered two coats of brown mortar and hard finished.....the cellar ceiling plastered and whitewashed.....a moulded plaster cornice in the parlor.....Timber of white pine!.....first and second tiers of beams 3 by 9, 16 in. between centers.....roof top 3 by 8, $\frac{1}{2}$ ft. apart.....trimmers $\frac{1}{2}$ inches thick.....partitions of 3 by 4 post, 16 in. between centers.....Roof as for Design XXXI.....cornice and veranda, as drawn in Plate 29.....balcony railing the same as veranda, supported by heavy brackets.....all the floor and veranda roofs the same as for Design XXXI.....Moulded base, 2 in. thick, in first story, and 1 $\frac{1}{2}$ in second.....stairs with moulded strings, rails, newels and balusters.....enclosed stairs to cellar. In the first story 3 double windows, 8 lights each, 1 $\frac{1}{2}$ by 19.....4 single, 8 lights, 10 by 19, in second story, 2 double windows, 8 lights, and 1, 10 lights, 1 $\frac{1}{2}$ by 16.....4 single, 8 lights, 10 by 16.....ashes, 1 $\frac{1}{2}$ in. thick, glazed with single thickness Winslow glass, and double hung by weights and cord. Five 6 light windows in the cellar, secured by butts, bolts and inside shutters.....Venetian rolling blinds to all the windows above the cellar, moulded both sides, and hung by white plate hings, and secured by patent fastenings.....Doors, in first and second stories, 1 $\frac{1}{2}$ inches thick, 6 panels, moulded both sides, hung by 4 by 4 butts, and secured by 5 in. mortice locks.....white porcelain knobs in first story, and mineral in second.....Architraves 1 $\frac{1}{2}$ in. thick, $\frac{1}{2}$ in. wide, moulded.....three moulded wood mantles, with hearth borders.....closets all to have the necessary shelves and hooks.....Front door bell with white porcelain pull.....First story 10 ft. high, second 9 ft., cellar 7 ft 6 in., all in the clear.

The brick walls rubbed smooth and oiled with linseed oil, and painted two coats of white lead and linseed oil, shaded such color as may be desired.....all the woodwork, inside and outside, not including blinds and interior floors, to have two coats of pure white lead and pure linseed oil.....the blinds to have three coats of lead, boiled oil and varnish, shaded the same color as superstructure walls.....stair rails to have three coats of varnish and rubbed.

SPECIFICATIONS FOR DESIGN XXXIII.

Alt. masonry construction with plaster with a door 17 in. thick, 7 ft. 6 in. high, four stories high, built, stone, masonry, the other brickwork, the building with 5 feet, 6 in. in all, in kitchen with range, hooks and eyes, and one in second story, all for wood fires.....one grate and marble mantel set in the parlor.....Superstructure walls, roofs and plastering the same as for Design XXXII. Cornices and balconies, as drawn in Plate 24, Figs. 3, 4 and 5.....Timber, floors, stairs, base, doors, closets, &c. as for Design XXXII.....One double window in first story, 10 lights, 14 by 20... one double, 8 lights, 14 by 20.....one triple, 12 lights, 14 by 20.....two, 6 lights, 10 by 18, and one, 4 lights, 14 by 20.....In second story, one triple window, 12 lights, 14 by 18.....one double, 10 lights, 14 by 18.....two double, 8 lights, 14 by 18.....three, 4 lights, 14 by 18.....In third story of campanile, 4 double windows, circular heads, 6 lights..... all the sashes 4-2 in. thick, glazed with single thickness French glass and hung by weights and cord.....five 6 light windows, 10 by 12, in the cellar, with plain inside shutters.....blinds and painting the same as for Design XXXII.

DESCRIPTION OF THE PLATES.

- PLATE 19.—Design XXXI. Geometrical elevations of the lawn and entrance fronts of a Villa in the Italian Style.
- PLATE 20.—Design XXXI. Ground plans of the first and second stories, containing, on the first floor, seven rooms, vestibule, hall, saloon, entry, two stair cases and five closets; and, on the second floor, six sleeping-rooms, and ten closets, dressing-rooms, &c.
- PLATE 21.—Designs XXXII. and XXXIII. Ground plans of the first and second floors.
- PLATE 22.—Designs XXXII. and XXXIII. Perspective views of two small Villas in the Italian style.
- PLATE 23.—Exterior details for Design XXXI. Fig. 1. Main cornice; *a*, iron roof; *b*, planking; *c*, rafters; *d*, gutter; *e*, *e*, brackets; *f*, fascia; *g*, *g*, sheathing. Fig. 2. *h*, planking of veranda roof; *k*, *k*, brackets; *l*, fascia; *m*, open fascia; *n*, antæ cap; *o*, *o*, section of antæ; *p*, *p*, base; *r*, floor. Fig. 3. Section of sheathing, full size. Fig. 4. Section representing the joining of the sheathing and veranda roof, full size. Fig. 5, represents the hips and valleys, and locations of the chimneys on the principal roof. Fig. 6. Lattice filling under the veranda. Fig. 7. The ground plan containing the several divisions of the cellar.
- PLATE 24.—Exterior details for Design XXXII. Fig. 1. Main cornice and brackets. Fig. 2. Veranda cornice, railing, and columns. For Design XXXIII. Fig. 3. Main cornice. Fig. 4. Balcony rail and brackets; and Fig. 5. the same, over the veranda or terrace. For Design XXXI. Fig. 5. Section of the architraves of the first and second stories. Fig. 7. Caps for the windows and doors of first story.

ESTIMATE

Of the Materials and Labor required in the erection of Design XXXII.

| | | | | | |
|--|--------|--------|---|------|-----------|
| 102 cubic yds. excavation, - - - | 9 | \$9 18 | 312 lin. ft. base, - - - | 4 | \$12 48 |
| 1425 cubic ft. stone work, - - - | 10 | 142 50 | 15 steps and risers—principal stairs, - | 3 00 | 45 00 |
| 57880 brick in walls, &c. - - - | 9 00 | 520 92 | 12 " " cellar, - - - | 75 | 9 00 |
| 121 ft. water table, - - - | 45 | 54 45 | 6 front and rear steps, - - - | 1 50 | 9 00 |
| 6 blue stone sills, - - - | 50 | 3 00 | 6 double frames, sashes and casings, - | 7 50 | 45 00 |
| 27 steps and coping, - - - | 14 | 3 78 | 8 single " " " - - - | 4 50 | 36 00 |
| 15 brown stone sills, - - - | 1 50 | 22 50 | 6 cellar " " " - - - | 2 00 | 12 00 |
| 18 " lintels, - - - | 1 30 | 23 10 | 12 doors, - - - | 9 00 | 108 00 |
| 1 polished blue stone hearth, - - - | | 2 50 | 1 cellar door, - - - | | 4 50 |
| 12 ft. blue stone for kitchen hearth, - | 16 | 1 92 | 3 wood mantles, - - - | 3 50 | 10 50 |
| 2 grates, - - - | 10 00 | 20 00 | 4 closets, shelved, - - - | 3 25 | 13 00 |
| 1 marble mantle, - - - | | 20 00 | 55 ft. tin leader, - - - | 15 | 8 25 |
| 526 super. yds. plastering, - - - | 25 | 131 50 | Balcony, - - - | | 14 00 |
| 57 lineal ft. cornice, - - - | 25 | 14 25 | 54 ft. of blinds, - - - | 60 | 32 40 |
| 3046 ft. timber, per h. - - - | 2 00 | 60 92 | 36 " " - - - | 1 00 | 36 00 |
| 595 super. ft. partitions, - - - | 1 1/2 | 8 93 | 500 lbs. white lead, - - - | 6 50 | 32 50 |
| 1309 " " sheathing and iron roof, - | 16 1/2 | 215 99 | 22 galls. linseed oil, - - - | | 67 14 74 |
| 152 lin. ft. main cornice, - - - | 70 | 106 10 | 3 " boiled linseed oil, - - - | 77 | 2 31 |
| 20 " " veranda " - - - | 70 | 14 00 | 2 " spirits turpentine, - - - | 50 | 1 00 |
| 15 " " projection " - - - | 30 | 1 50 | Putty, litharge, glue and colors, - | | 5 50 |
| 2 veranda columns, - - - | 10 00 | 20 00 | 20 days' painter's labor, - - - | 1 75 | 35 00 |
| 188 super. ft. of narrow floor and roof, - | 8 1/2 | 15 18 | | | |
| 1088 " " interior " - - - | 4 | 43 52 | | | |
| | | | | | \$1946 32 |

Design XXXIII.

| | | | | | |
|---|--------|---------|--|-------|-----------|
| 141 cubic yds. excavation, - - - | 9 | \$12 60 | 370 lin. ft. of base, - - - | 4 | \$14 80 |
| 1690 " feet stone walls, - - - | 10 | 169 00 | 15 steps and risers, - - - | 3 00 | 45 00 |
| 77509 brick in walls, &c. - - - | 9 00 | 697 58 | 12 " " - - - | 75 | 9 00 |
| 143 lineal feet water table, - - - | 45 | 64 35 | 14 steps to third floor of campanile, - | 60 | 8 40 |
| 5 blue stone sills, - - - | 50 | 2 50 | 6 front and rear steps and risers, - | 1 50 | 9 00 |
| 27 feet coping and steps, - - - | 14 | 3 78 | 5 square double frames, complete, - | 8 00 | 40 00 |
| 16 brown stone sills, - - - | 1 50 | 24 00 | 2 " triple " " - - - | 9 50 | 19 00 |
| 15 " " lintels, - - - | 1 30 | 19 50 | 4 circular double " " - - - | 10 00 | 40 00 |
| 1 polished hearth, - - - | | 2 50 | 6 square single " " - - - | 5 00 | 30 00 |
| 1 kitchen hearth, 12 feet, - - - | 16 | 1 92 | 5 cellar frames, - - - | 2 50 | 12 50 |
| 1 grate, - - - | | 10 00 | 16 doors, frames and strings complete, - | 9 00 | 144 00 |
| 1 marble mantle, - - - | | 22 50 | 1 cellar door, - - - | | 1 50 |
| 673 yds. plastering, - - - | 25 | 168 25 | 2 wood mantles and hearth border, - | 3 50 | 7 00 |
| 72 feet cornice, - - - | 25 | 18 00 | 5 presses and closets shelved, - - - | 3 50 | 17 50 |
| 3696 feet timber, per h. - - - | 2 00 | 73 92 | 62 feet blinds, - - - | 1 00 | 62 00 |
| 400 super. ft. partition, - - - | 1 1/2 | 11 35 | 36 " " - - - | 60 | 21 60 |
| 1321 " " sheathing and iron roof, - | 16 1/2 | 217 96 | 76 " tin leader, - - - | 15 | 11 40 |
| 110 lin. ft. main cornice, - - - | 55 | 60 50 | 550 lbs. white lead, - - - | 6 50 | 35 75 |
| 45 " wing " - - - | 75 | 33 75 | 24 gallons linseed oil, - - - | 67 | 16 08 |
| 54 " campanile, " - - - | 45 | 24 30 | 3 " boiled " - - - | 77 | 2 31 |
| 18 " veranda, " - - - | 40 | 7 20 | 2 " spirits turpentine, - - - | 50 | 1 00 |
| 57 " balcony rail, cornices and brackets, - | 80 | 45 60 | Putty, litharge, glue, and colors, - | | 5 00 |
| 21 " terrace rail and base, - - - | 1 10 | 23 10 | 22 days' painter's labor, - - - | 1 75 | 38 50 |
| 2 veranda columns, - - - | 5 00 | 10 00 | | | |
| 387 super. ft. narrow floor and roof, - | 8 1/2 | 32 90 | | | |
| 1240 " interior floors, - - - | 4 | 49 60 | | | |
| | | | | | \$2401 09 |

Design XXXI. will cost \$7,656 00; Design XXXII. will cost \$1946 32; Design XXXIII. will cost \$2401 09



COTTAGES AND LIVING COTTAGELY.

Let the over-rich, and those who are ambitious of being thought so, indulge to ever so ruinous an excess in uncomfortable magnificence in their town houses, they retire into the country at certain seasons to live cottagely, as Bishop Taylor calls it, and enjoy themselves. Cottages are proverbial for love, and where there is love there must first be comfort. The cut at the head of this chapter is a view of a Grecian Cottage on the banks of the Passaic River in New Jersey which was constructed with a design to combine all the arrangements that could be conducive to domestic convenience in a small dwelling. Its style, the Grecian Doric, which is generally supposed to be adapted only to stately buildings for public uses, does not deprive it of its cottagely character, for Cottages need not necessarily be rude and rustic in appearance, nor cramped in their dimensions; for, as it is said in the *Restitution of Decayed Intelligences*, "albeit a Cot in our language is a little slight built country habitation (such as, after the French we call cottage), yet as all things begin little, so that which first bore the name of a *Cote* might afterwards come to be the habitation of a worshipful family, and yet retain the name of *Cote* still, which being no other originally in itself than is aforesaid, carrieth it honor in the antiquity thereof."

Cottages generally exhibit in the purest and most winning form that state of social existence which certain new fangled philosophers call the "misery of the isolated household;—the misery of tilling your own garden, of eating your own fruit, of rocking your own child, of sitting at your own table, of entertaining your own friends, of poking your own fire, and, in the expressive language of the Bible, of sitting under your own vine and fig-tree. These are the miseries which the well meaning disciples of Fourier are trying to reform the world of; but while self-preservation remains an instinct and our sensations are individual, man will always prefer living cottagely to living in a phalanstery. With entire confidence in the instinctive good sense of the people we shall continue making plans for "poor men's cottages" and rich men's villas, entertaining no fears that the systems of certain philosophers who mean well but reason badly, will ever induce mankind to abandon the pure and natural delights which spring from living cottagely. A mode of existence which is so conformable to nature should, in all its extrinsic surroundings, be equally pure and simple: and as a man's house is the next most

noticeable thing to his person, it should be as free from oddities and eccentricities as his dress. But from a lack of taste, or a most mistaken idea of economy in employing incompetent persons, or dispensing altogether with professional advice, there are too many examples of costly residences, which are standing proclamations of the ignorance and ill taste of their owners. If "a thing of beauty is a joy forever," these architectural absurdities are things to annoy forever all who see them, and would be proper subjects of presentment as nuisances before an æsthetic grand jury. It is the practice with many persons when about to build, to inspect all the new houses in their neighborhood, and borrow a cornice from one, a roof from another, a pillar from a third, and a fanlight from a fourth, and with the jumble to form a structure, which has no distinct character of its own, nor a resemblance to anything else; which is congruous only in its incongruousness, and as uncomfortable as it is uncomely. A notable instance of this patch-work architecture and most costly parsimony may be seen in a church in ———, erected not many years since, from the joint designs of the builder, and the pious committee appointed to select a plan. Now, of all buildings in the world, a church should be free from contradictions and deceptions; it should be a grand truth in itself, and by its purity of style, simplicity of details, beauty of proportions, and absence of trickery, form a harmonious whole, which will impress the mind as an emblem of the spiritual truths proclaimed within its walls. The church to which we allude, and it is but one of many similar examples that we might point out, is the reverse of all this. The front of it exhibits parts of four different styles of architecture, which is quite as absurd as it would be for the pastor to preach as many kinds of theology; it has a Roman pediment supported by Grecian Doric fluted columns, a tower of Grecian character, with an embattled parapet like a Gothic Castle; the gallery inside is supported by Doric columns; Corinthian pilasters support a Doric entablature, and Ionic capitals serve as supporters for Gothic lamps, while the gallery is enriched with Byzantine ornaments. Such an undignified jumble as this could, of course only have been the result of most unchristian-like presumption, or equally unchristian-like parsimony.

We are by no means advocates of architectural pedantry, but, on the contrary, respect a bold departure from established rules when a reason can be given for it; but the mistakes of ignorant imitators are entitled to no respect. The beauty of a fine landscape has often been destroyed, and an abundance of good building materials and much valuable labor wasted for the sake of saving the trifling cost of professional advice. Cottages, which are intended to promote domestic comfort, require the services of a professional architect, as much as buildings of greater pretensions. There should be nothing to ruffle the felicity of their isolated households, which professional skill can prevent; and as leaky roofs, smokey chimneys, ill-fitting windows which are literally *wind-ys*, inconvenient closets, break-neck stairs and the like, are great disturbers of domestic tranquillity, those who wish to avoid them should make sure of the aid of a competent and honest architect in the construction of their dwellings. The position of a house is by no means a trifling consideration, for even on a small plot of ground the difference of a few feet may secure a cheerful prospect or a warm shelter from prevalent winds; yet even on these obvious points it is surprising to see the mistakes that are constantly made by intelligent people, who depend upon their own judgment in such matters instead of employing professional assistance. Every spot of ground has its peculiar advantages and disadvantages, and to make the most of the one and overcome the other requires the aid of professional skill; for it is very certain that those who make it a business and a study must have a quicker eye and a better judgment in the laying out of grounds than those who do not.

The art of landscape gardening is an essential part of the accomplishments of an architect, for the main beauty of a rural dwelling is its harmonizing with the scene of which it forms a part. The same house that looked picturesque and beautiful on the top of a hill would look extravagant and whimsical on a plain; a country house with a southern front should have a projecting roof and a piazza; but one fronting the north would look more cold and cheerless by the addition of an overhanging roof or a veranda. Yet nothing is more common than to see houses in the country with gloomy-looking piazzas on the north side which is always in shadow, while the back part is left to scorch in the sun without even the protection of a hooded window to cast a shadow.

The cottage of which we give a representation at the head of these remarks, is in a style which beautifully harmonizes with the scene in which it is placed. It is situated in the town of Lodi on the left bank of the Passaic river, in New Jersey, and is constructed of wood in the Ionic order. The position of the house is elevated, and the hills at the back rise considerably above the roof, which is nearly flat. It is surrounded by fruit trees of various kinds, and the general aspect of the building corresponds with the highly cultivated grounds in its vicinity. The main body of the house has two

full, stories 11 feet and 9 feet inside. The principal floor contains a hall 10 feet wide, two drawing-rooms, each 17 by 20 feet; a Dining room and a Parlor, each 17 by 16, a pantry and ante-hall, with principal stairway. In the second story there are four chambers and two bed rooms; in the basement are a kitchen, two bedrooms, a store room, two pantries, dairy, cellar, scullery and fuel room. The grounds in which this very elegant and commodious cottage is built, are laid out in a most tasteful manner and well stocked with choice fruit trees and a great variety of ornamental shrubbery. The house fronts the south-west, and the library and breakfast room are on the eastern side.

The designs XXXIV., XXXV. on plate 26, in this part of the Architect, are cottages in the English style, intended for suburban residences for small families and for the better classes of laborers and mechanics. They are arranged with a view to economy of space and materials, and while beauty of aspect has not been neglected, no external ornaments have been added which tend to an unnecessary increase of cost.

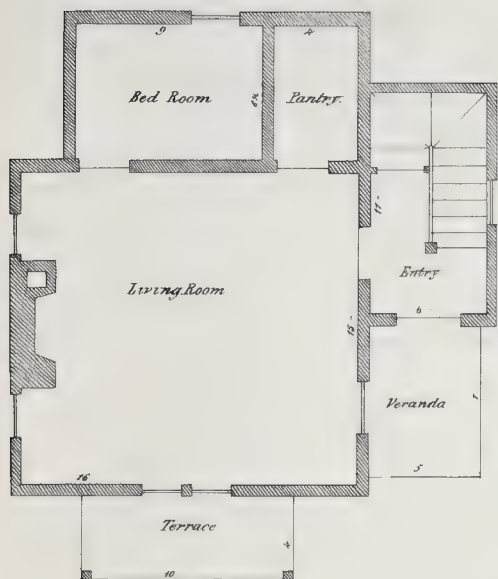
Good taste in architecture, like good taste in all other things, is the result of education, and must, of course, be progressive; the gradual advancement made by mankind in the construction of their dwellings, from the time when they lived in mud hovels up to the present, when they live in marble houses, has been very slow, but it has been sure and constantly improving. Let us not vainly imagine, therefore, that we have arrived at perfection, because our houses so much excel those which were inhabited by our grandfathers; we are still in a transition condition, and, while we remain contented with our present improvements, we may rejoice that our children will be better housed than ourselves. But the advancement of society is not uniform; while one man shoots far ahead in the race of improvement, another lags behind, and scarcely advances a step from the position occupied by his ancestors. Yet no individual can separate himself wholly from the rest of mankind; he may cling with idolatrous fondness to the ways of his fathers, but he cannot wholly resist the pressure of circumstances by which he is surrounded. He may build his house to resemble in externals the forms of dead centuries, but interiorly it must conform to the times in which he lives. We build churches after mediæval patterns, but we fill them with modern conveniences. Wilton carpets and gas lights harmonize but oddly with Gothic arches, yet we cannot sacrifice the comforts to which we have been educated to our reverence for old ceremonies. Just where Gothicism interferes with our comforts our admiration for its forms ceases. Precisely the same rule holds good in our dwellings as in our churches; we may imitate some of the picturesque points of old houses, but we admit nothing that interferes with our sociable enjoyments, and in this we are true to ourselves, and admit that we care more for present comforts than for the ways of our ancestors. The man cannot imitate the child if he would; neither can the present imitate the past. We have been irresistibly forced forward, and so gradually that it would be difficult to mark the point where our advancement commenced, or name the precise nature of our improvement, but we have only to look back a few years and we see that the tide of human progress has floated us onward into regions that were unknown to our fathers. Still, as we have remarked, this advancement is very far from being uniform; the few get ahead and the many lag behind.

The annexed engraving is the representation of a house recently erected in the suburbs of New-York, in a charming situation, where nature has so beautified the scene that it would seem impossible for man to deface it by such an unsightly erection as this. Yet this extremely plain dwelling, so inconveniently arranged, so destitute of beauty, so wanting in the requisites to health and enjoyment for a family of refined habits, is a rather favorable example of common country houses, and is, moreover, a considerable advance on the dwellings occupied by the same class that inhabits this, but a few years since. The little outhouse, so obtrusively conspicuous, and in such unpleasant neighborhood to the main building, offensive as it may be now, would have been regarded as an evidence of refinement once. Dr. Johnson, in his tour to the Hebrides, while on a visit at the castle of a Scotch lord, laments the absence of such a convenience as this. If we could look into the interior of this homely country house we should find all its arrangements to harmonize with its ugly outside. The windows, the door, and the chimney; the absence of a piazza, the lack of all ornamentation, of vines and shrubbery, bespeak a degree of ignorance of the means of enjoyment, of niggardliness and contracted views, that ere long will be looked upon with incredulity

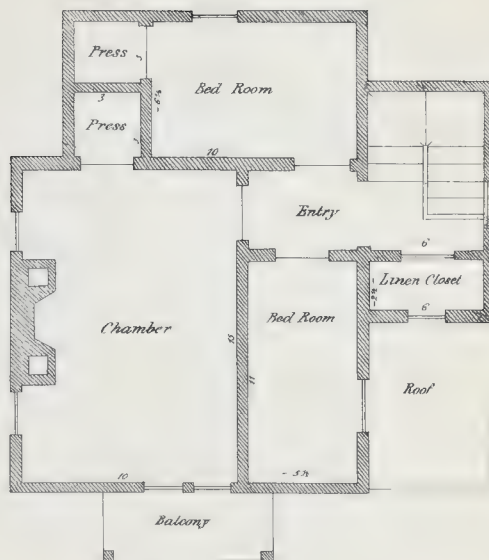


The cheapness of travel, which induces our people to go abroad, and the troubles of Europe which are forcing to our shores hordes of foreigners, have a most salutary effect upon our habits, and, together with the circulation of popular works on architectural subjects, have had a marked influence upon the character of our domestic architecture. The great advance made in public taste during the past five or six years, as shown by the improved style of building, both in town and country, is as gratifying as it must be surprising to those who do not watch narrowly the causes of the rapid mutations of society in this free, and happy because free, country of ours. As every little helps in this, as in other matters, we may, without arrogance, presume that the circulation of our work, which has steadily increased since the publication of the first number, has not been without some influence; and we shall strive to render the succeeding numbers still more subservient to the good cause which we have had in view from the beginning, which has been to disseminate true principles of architecture as applied to rural and suburban residences, and to create a distaste for such ill looking and ill contrived dwellings as the above, by furnishing plans of houses which are not only more beautiful in appearance, more convenient in the arrangements, but more economical in their construction.

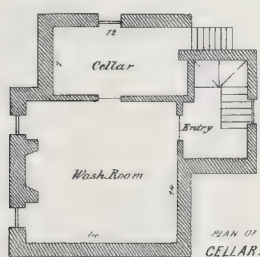
A recent English author remarks, in a rather grand style, that the cottage orné is a nondescript kind of building which requires only a minimum of mind on the part of the architect; and if the majority of these buildings were to be taken as models of the requirenda of small families of moderate means, living in the country, we should not be disposed to dispute the correctness of his judgment; but because such houses rarely exhibit a cultivated taste and scientific judgment, it is no reason that they do not fairly belong to the province of the architect, and are as worthy of attention as the more pretending villa. To secure comfort in the interior, and beauty in the exterior, of a small country house, requires something more than a minimum mind, as is sufficiently plain from the great number of ill-looking and inconvenient houses which we see, whose defects of situation and construction are evidently not the results of poverty but of ignorance. We have given an example of a plain country house, in which no attempt is made at ornamentation, or beauty of aspect, and we should be glad to give an example of an opposite kind, where an attempt at picturesqueness and richness of effect has produced an infinitely more disagreeable result, from a prodigality of ornament and ignorance of the true principles of construction. Honest poverty is dignified and worthy of respect, but ignorant pretensions and shabby gentility are only entitled to contempt. Not far from the house of which we have given a representation on the preceding page, is a pretentious building of the class to which we allude, which, although large and costly, is yet so cut up and divided into towers, balconies, and galleries, as to have an appearance of meanness and discomfort which an inspection of the interior fully justifies. To heighten the absurdity of the effect, it is built upon so small a plot of ground that the lawn in front is scarcely wide enough to contain a geranium pot; and the gardener engaged by the proprietor to lay out the "grounds," observed that he could stand on one of the towers and sprinkle the entire garden with his watering-pot. If the author to whom we have alluded had in his mind a cottage orné like this, of which there are a good many examples in every part of the Union, he was quite right in saying that such buildings required a minimum of mind in the architect; and he justly added that the landscapes of Gaspar Poussin contained hints enough to stud a province with them. A good many of the cottages and villas in the suburbs of our large towns appear to have been transferred from old landscapes and picture-books, and it is not unlikely that their proprietors understood "landscape gardening" to mean the imitation of landscape paintings. A wealthy actor is building himself a granite mansion on a conspicuous site upon the banks of the Hudson, which looks as though the design had been copied from Macbeth's castle, as exhibited on the stage. The travellers on the Hudson, as they pass this odd looking structure, if they have ever been frequenters of the theater, will be prepared to see it suddenly pulled apart, at the sound of the prompter's whistle, and the round towers with their embattled parapets sliding off in opposite directions behind the trees on either side. As copies of Claude's landscapes are rather more frequently brought over here than those of Gaspar Poussin, we hope that those who prefer going to a painted landscape for a design of a country house to employing an intelligent architect to furnish one, will give the preference to Claude, as his architectural embellishments are infinitely more beautiful than the gloomy looking villas and castles in the landscapes of Poussin. But the better way will be to avoid both, and call in the aid of a professed architect.



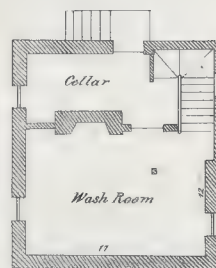
FIRST STORY



SECOND STORY.

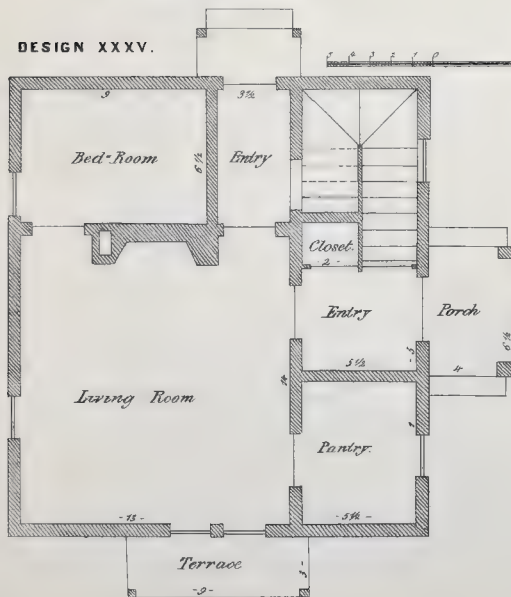


PLAN OF CELLAR.

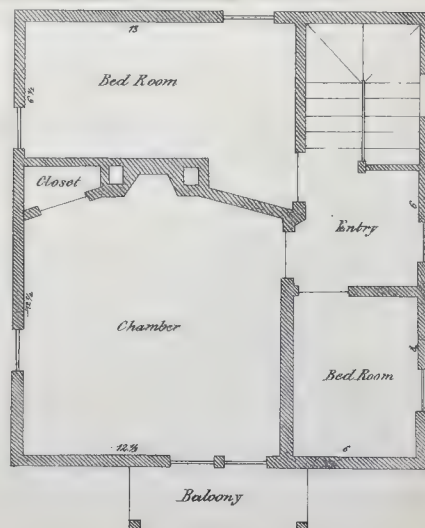


PLAN OF CELLAR

DESIGN XXXV.



FIRST STORY.



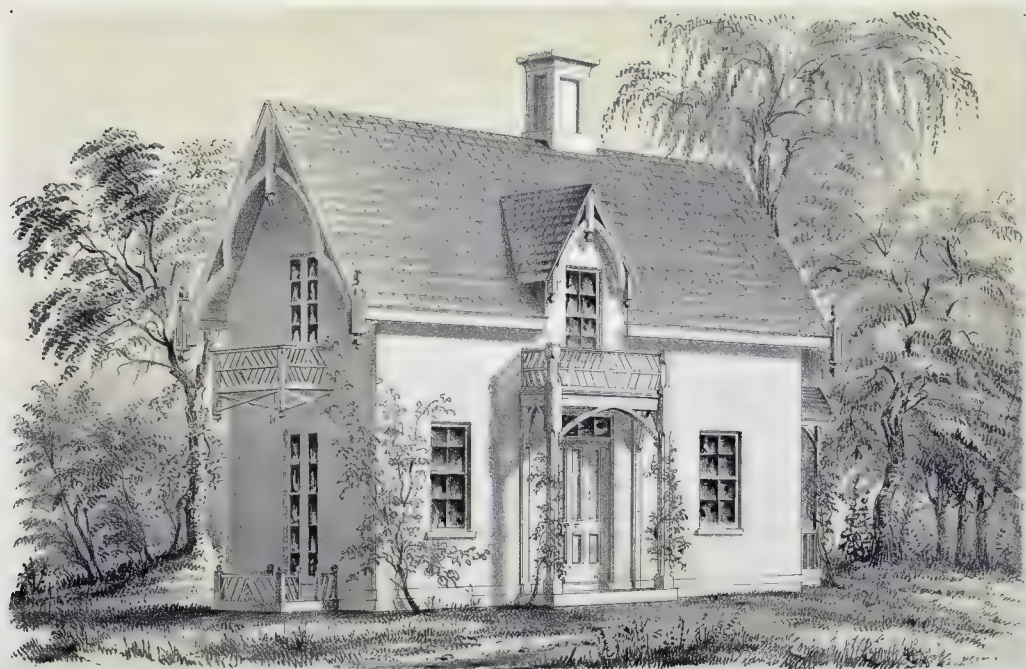
SECOND STORY





COTTAGE

English Style

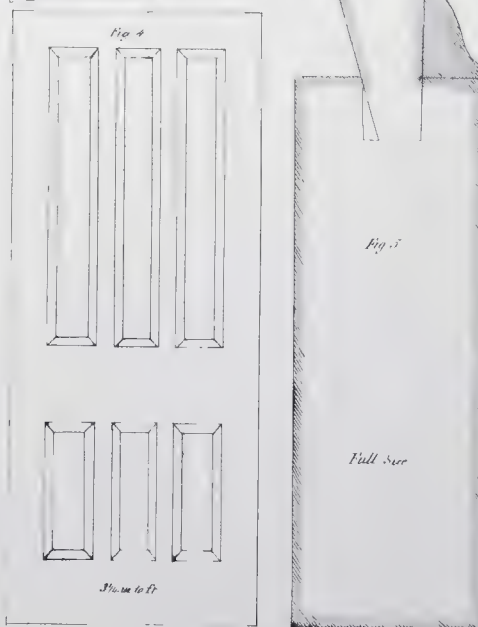
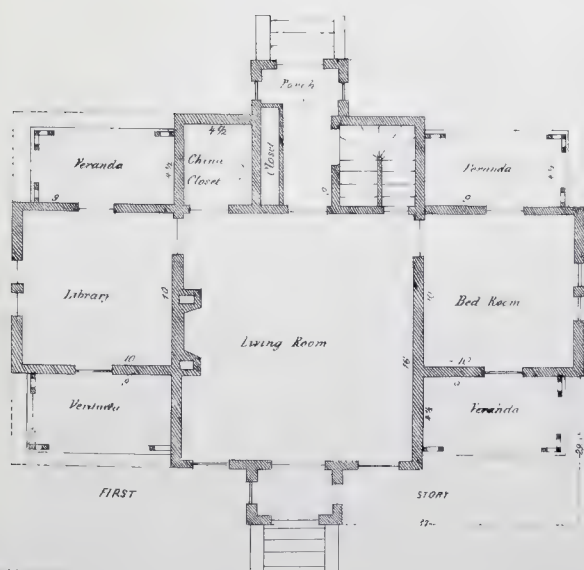
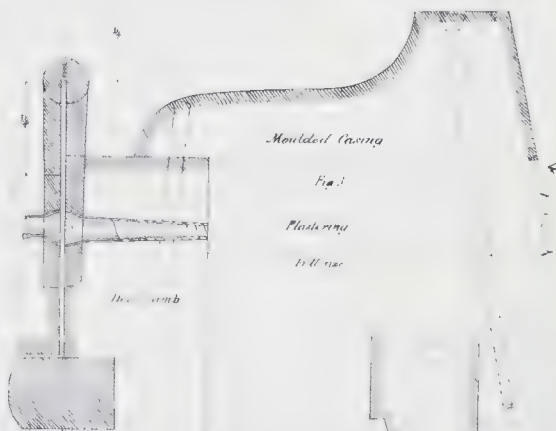
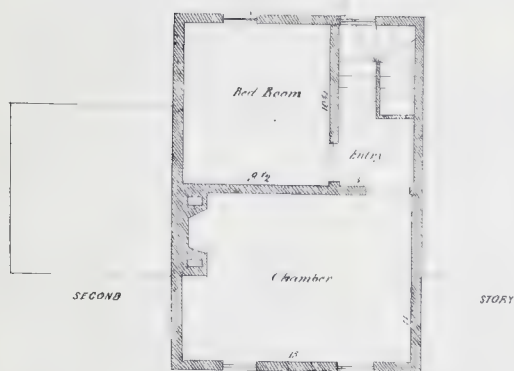
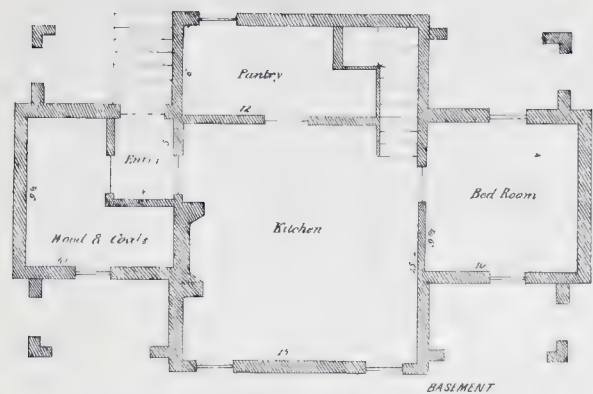


Designed & Del. by W. H. Ranlett

COTTAGE

English Style

Mayes & Kett, Lith. 95 William St. N.Y.





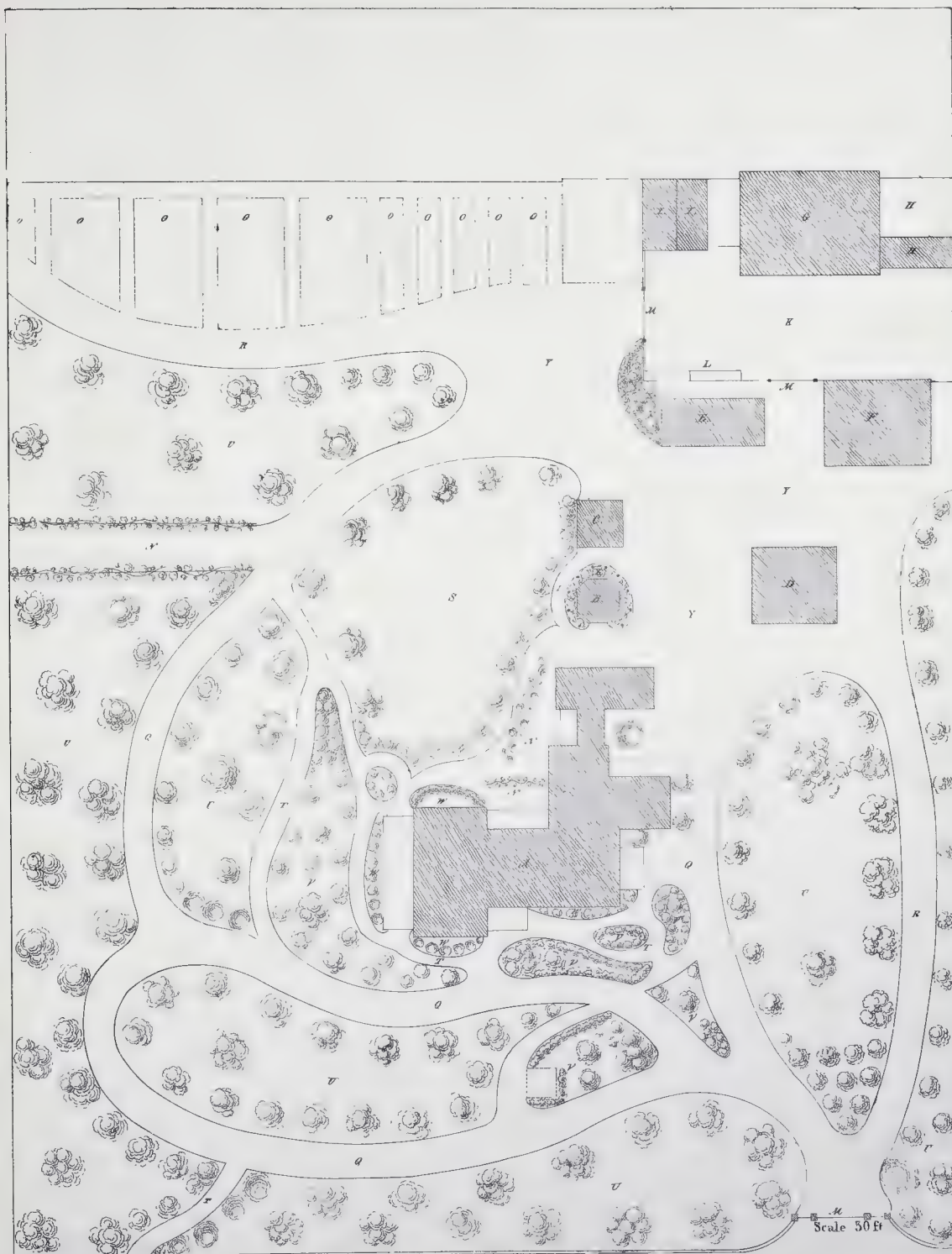
End Elevation

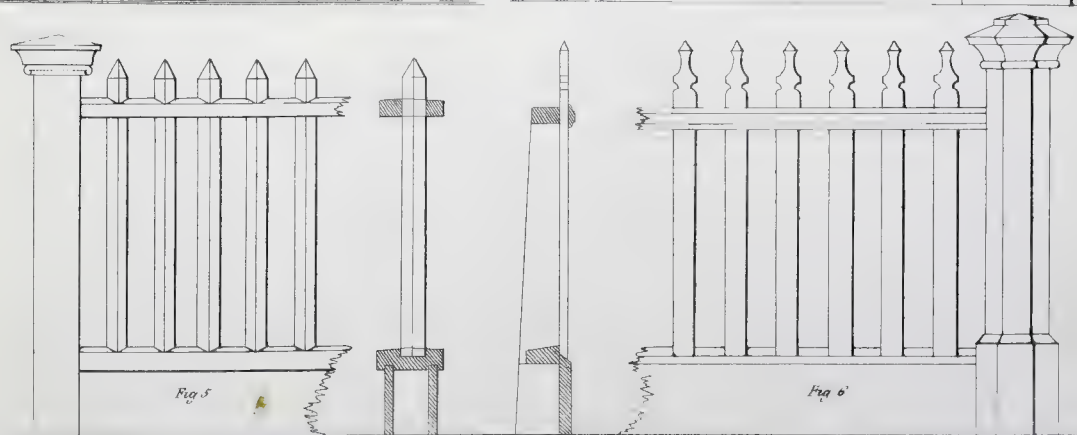
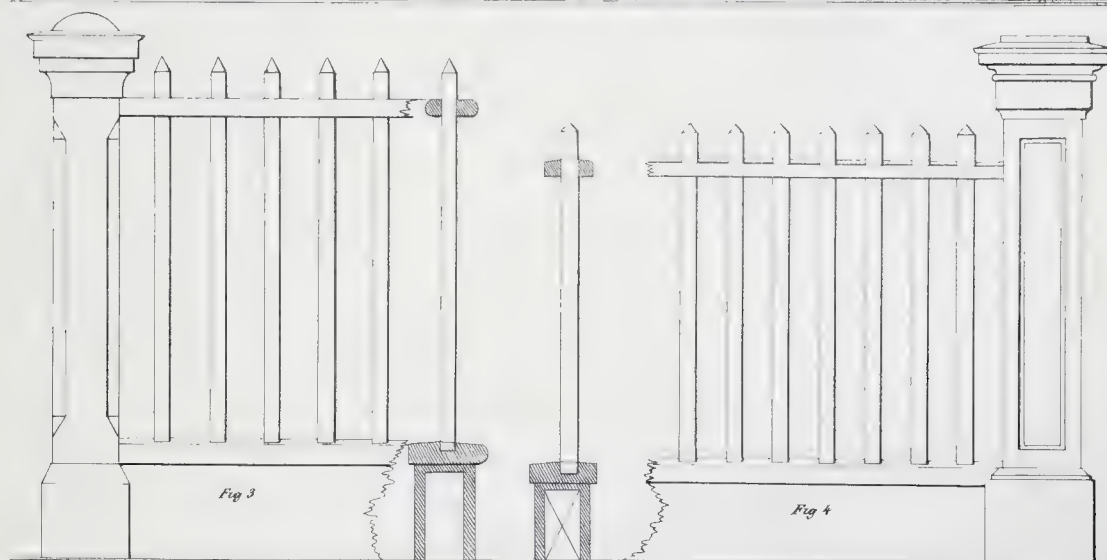
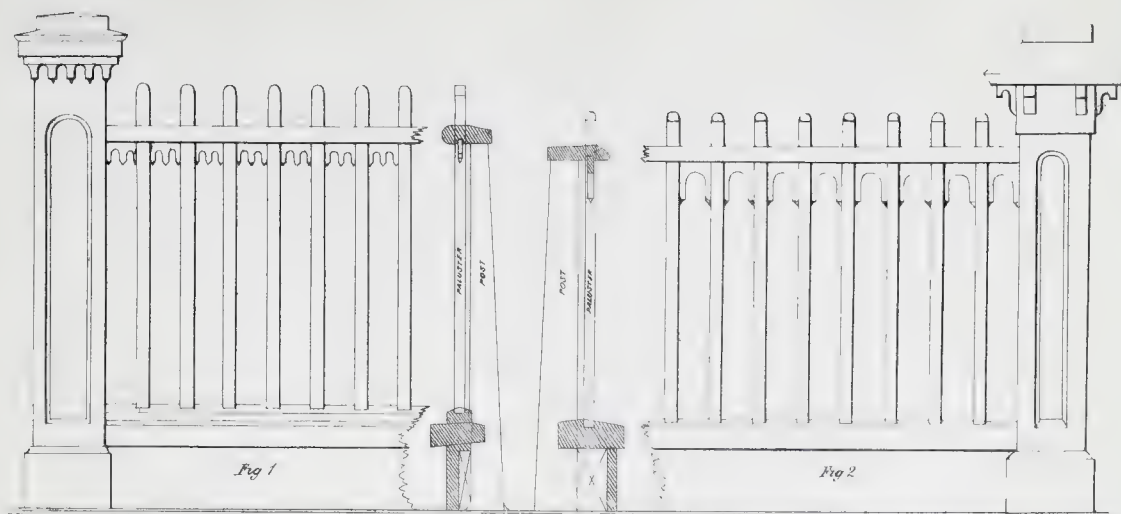


Designed by J. W. H. M. 1861.
FOR G. R. WARD ESQ.
New Brighton.

COTTAGE.
Front Elevation.

MADE IN U.S.A. BY J. W. H. M.





SPECIFICATIONS

Of the Labor and Materials required in the Erection of Designs XXXIV. and XXXV.

Cellar walls of stone, 18 in. thick.....window sills, steps and hearths of blue stone.....chimneys of suitable brick, and outside walls filled with brick.....Plastering in the two stories hard finished. Frame of pine timber, strongly braced.....studding with 2 by 4 strips, 16 in.sides covered with 3-4 boards nailed on, 7 in. to weather.....roof with best pine shingles, laid 3 thick on boards.....valleys lined with galvanized iron.....cornices, balconies and verandas as per elevations.....roof and floors of balconies and verandas of narrow, 1-2 in. wide, clear pine boards, 3-4 thick, 7 in. wide. Windows in Design 34: the sashes to hang by butts and fastened by bolts and latches, the glass set diagonally. Two double and 7 single windows, in Design 35, sashes 1-2 in. thick, hung by cords and weights.....2 double windows, 10 lights, 6 single, 8 lights, and 4 with 2 lights. Glass 12 by 16 and 12 by 18.....4 in each cellar, 5 lights, 9 by 12.....blinds, with stationary slats, hung to all the large windows. Doors 1-4 in. thick, 6 panels, moulded on one side, hung by patent butts and secured by 3 1-2 in. mortice locks with mineral knobs.....all the jambs and casings properly made and put up. In Plate 27.....the wood work, inside and outside, including the blinds, to have two coats.

Design XXXVI. Excavations, 3 feet deep, house elevated 4 ft. 9 in. above the grading.....Walls of quarry stone, laid in mortar, 3 feet high, and brick 8 inches thick to the sills.....piers of brick, 8 inches thick, on stone foundations.....Window sills, steps, coping, and kitchen hearth of blue stone.....One veined marble mantle in the parlor.Plastering in first and second stories: 2 coats of brown mortar and hard finished, in basement, 1 coat of brown on lath, slipped and whitewashed.....a neat cornice in the parlor. The outside walls filled in with brick on the edge.....Frame of pine timber: sills, posts, plates, framing and trimmer beams 4 by 8.....floor beams 3 by 8, 16 in.roof beams 3 by 6, and rafters 3 by 6, set 2 feet 8 in.sleepers of cedar, 3 feet apart.....main roof, wings and porches covered with best cedar shingles, on hard wood lath.....veranda roof of narrow clear pine plank, grooved, and tongues put in with white lead, and blind nailed.....Siding of narrow, clear pine boards, 5-8 thick, planed and rabbeted, and laid not over 6 in. to weather.Cornices and veranda, ante and trimmings as represented in Plate 28.Floors of good sound milled plank, laid in courses.....Stairs enclosed.....Base, door, jambs, and casings to be made as in Plate 27.....3 1-2 mortice locks, with mineral knobs to all the doors.In first story, 2 windows, 16 lights, 4, 10 lights, 2, 8 lights, and 4, 4 lights, all 12 by 18.....sashes 1-2 in. thick.....In second story, 4 windows, 8 lights, 12 by 15.....in basement, 6 lights, 12 by 12, sashes 1-4 thick.....in first and second stories hung by weights and cord. Venetian blinds to the windows in first and second stories, and panel shutters to basement windows.....2 wood mantles, and hearth border. Pantry and China closet shelved.Materials of the best quality and the work neat and substantial.Two coats of pure white lead and linseed oil put on inside and out, except interior floors and shingles, shaded a light gray.....the cornices and blinds to be shaded darker than the lobby of the house.

FORM OF CONTRACT.

Articles of Agreement, made this *Twenty-fifth* day of *October*, one thousand, eight hundred and forty-eight, by and between *Robert Devitt* of the City, County and State of *New-York*, book-seller, of the first part, and *Samuel H. Kimball*, mason, and *Charles L. Lochman*, carpenter, of the firm of *Kimball & Lochman*, builders, of *Eastton*, *Richmond County* and *State* as aforesaid, of the second part. *Witnesseth*

That the party of the second part, for and in consideration of the covenants and agreements hereinafter named, on the part of the party of the first part, doth agree for themselves, their executors, administrators and assigns, to do for the party of the first part, in the best manner, all the work of the Cottage house and out-buildings, at *New Brighton, Staten Island* (on lot No. 40, corner of street and *Richmond Terrace*), as set forth in the annexed Specification and plans, made by *W. H. Ranlett*, Architect. To furnish at their own proper cost and charges all the materials which may be required for the same, including everything proposed to be done, with proper materials, in a workmanlike manner, and in accordance with the general plans and elevations, to the satisfaction of the owner: And that the party of the second part further agrees to the appointment of the first part of a superintendent, who shall have power to reject any work and materials which in his opinion is deemed imperfect and not agreeing with the plans and specifications, and whose decision it is agreed shall be final and conclusive, as between the parties. And the party of the second part further agrees to finish and complete the cottage and out-buildings, each in all its parts, on or before the *Twentieth* of *April* next, accidents by fire excepted.

And in consideration of the true and faithful performance of all and singular the above stipulations and agreements, on the part of the party of the second part, the party of the first part doth agree for him self, his executors, administrators and assigns, to pay or cause to be paid to the party of the second part the sum of one thousand, three hundred and fifty dollars, in four several payments as follows: the party of the second part providing a certificate in writing from the superintendent that the work and materials are good and the payment due.

When the frame shall be raised on the foundation walls, *Two Hundred and Fifty Dollars* (\$250).

When the frames are set, siding on, and roof shingled, *Two Hundred and Fifty Dollars* (\$250).

When the outside is complete, one coat of paint on, the floor laid, partitions set, lathed and scratch coated, sashes in and chimney topped out, *Three Hundred and Fifty Dollars* (\$350), and

When the contract on the part of the second part shall be complete, according to such plans and directions as may have been given by the superintendent, the balance of the contract price, *Five Hundred Dollars* (\$500).

It is mutually understood by all the parties, that the house shall be complete, according to the true intent and meaning of the plans and specifications, and that there shall be no charge or claim for any alteration or extra work unless the agreement for such extra work shall be endorsed on this contract, and signed by the parties hereto, before the doing of said extra work.

DESCRIPTION OF THE PLATES.

- PLATE 25**—Contains the first and second story and cellar plans for Cottages, Designs XXXIV. and XXXV., and a section plan of a door jamb and architrave, half full size.
- PLATE 26**—Perspective views of two Cottages in the English Style—Designs XXXIV. and XXXV.—which are very convenient for small families. XXXIV. contains five good rooms, and four good sized presses, closets, &c. a cellar, and large wash room or kitchen sufficiently lighted, in the basement—first story, 9 feet, attic, 8 feet, and basement, 7 feet.
- PLATE 27**—Contains the first and second stories and basement plans of a small Cottage Villa, Design XXXVI.; also, section drawings of interior detail. Fig. 1, of base for first story; Fig. 2, of base for second story; Fig. 3, plan showing the connection of a door, jamb, butt, plastering, and moulding secured by nails and screws; also the position of the butt to throw the door over the moulding, flat against the wall; Fig. 4, face elevation of a door, for the first story; Fig. 5, section of stile, panel and moulding; Figs. 1, 2, 3 and 5, full size, and Fig. 4, $\frac{3}{4}$ of an inch to the foot.
- PLATE 28**—Geometrical elevations of the front and side of a small Cottage Villa in the Semi-Italian style, Design XXXVI., to be erected at New Brighton, Staten Island, for Geo. R. Ward, Esq. This cottage is also intended for a small family. The first floor has a large parlor or living-room, a nursery or library, bed-room, two closets, two porches, and four verandas. Second story, two good sleeping-rooms; and the basement, a kitchen, bed-room, pantry and cellar. The first story ceiling 10 feet, second story 9 feet, and basement 7 feet, 6 inches, all in the clear when finished.
- PLATE 29**—Ground plot for Waldwic Cottage (of which a wood cut and plan was given in the last number). These grounds are to be laid out and executed, and the out-buildings all placed according to this plot. The house is sufficiently elevated above the general surface, to give the required effect to the lawns, walks, &c.; the slopes are to the east, south, and west. A, the cottage; B, octagon ice-house, 12 by 12, 9 feet deep, and 6 feet above the surface, all in the clear; C, smoke-house, 10 by 10, 3 feet below the surface and 6 feet above, in the clear—ice and smoke houses to be built of stone; D, wood-house, 22 by 25 (to be set 15 ft. nearer the ice-house); E, corn-crib, 12 by 30; F, coach-house, 25 by 30; G, barn, 30 by 40, to have a stone basement, 8 feet in the clear, for horses, cattle, &c.; H H, hog pen and yard, 20 by 27, with a good substantial stone wall, 4 feet high, and sunk three feet below the surface; I I, fowl house, 20 by 22; in two apartments, one story and attic, and stone basement, with sashes for light and winter sun—each apartment to have a yard adjoining; K, barn yard; L, water troughs, supplied by a hydraulic ram; M M M, gates made and hung to stone posts, to swing both ways; N N, grape arbor and trellis; O O, vegetable garden on a bank sloping southerly; P, stone wall, three feet thick, on a line with the rear of the barn, the upper side filled to the top with earth, and on the top a low open fence from the fowl yard, south 200 feet; Q Q, carriage road; R R, cart roads; S, bleaching lawn; T T, foot walks; U U, grass lawn, interspersed with forest and fruit trees, sweet scented flowers, evergreens, and shrubbery; V, V, flower beds, for hardy plants and annuals; W, hardy running roses, creepers, honeysuckle and other vines; hop vines from near the corner of the corn crib to the farm gate, and around the ice-house, the entrance to the ice-house on the east and to the smoke-house on the west.
- PLATE 30**—Elevations and profiles of wood fences in six different styles, drawn to a scale of $\frac{3}{4}$ of an inch to the foot; the balusters in Figs. 1, 2, 3 and 4, $1\frac{1}{2}$ inches square; Fig. 6, 3 inch by $\frac{3}{4}$ in.; the gate and corner posts cased and capped—all the intervening posts to be squared and made smooth for painting—the gates made like the frame, and hung by heavy straps, hooks and bolts, and secured by spring latches.

ESTIMATE

Of the Materials and Labor required in the erection of Design XXXVI.

| | | | | | | | | | | | | | | | |
|-----------------------------|---|---|---|----|-----|-----|--------------------------------------|---|---|---|---|----|----|-----|----------|
| 50 cubic yds. excavation, | - | - | - | 9 | 4 | 50 | 112 ft. plain cornice, | - | - | - | - | 35 | 39 | 20 | |
| 605 cubic ft. stone work, | - | - | - | 12 | 72 | 60 | 12 veranda ante, | - | - | - | - | 1 | 50 | 18 | 00 |
| 9578 hard brick laid, | - | - | - | 10 | 00 | 95 | 78 164 ft. veranda ceiling, | - | - | - | - | 4 | 6 | 56 | |
| 7166 salmon " " | - | - | - | 7 | 00 | 50 | 16 72 ft. lattice, | - | - | - | - | 6 | 4 | 32 | |
| 553 yds. plastering, | - | - | - | 25 | 138 | 25 | 35 steps and risers, | - | - | - | - | 1 | 35 | 47 | 25 |
| 68 ft. plaster cornice, | - | - | - | 24 | 15 | 84 | 104 lights, glazed sashes, 12 by 18, | - | - | - | - | 27 | 28 | 08 | |
| 29 steps and coping, | - | - | - | 14 | 4 | 06 | 32 " " 12 by 15, | - | - | - | - | 23 | 7 | 36 | |
| 7 door and window sills, | - | - | - | 10 | 2 | 80 | 36 " " 12 by 14, | - | - | - | - | 20 | 7 | 20 | |
| 12 feet kitchen hearth, | - | - | - | 16 | 1 | 92 | 1516 ft. floor, | - | - | - | - | 4 | 60 | 64 | |
| 1 marble mantle, | - | - | - | | 20 | 00 | 26 window frames complete, | - | - | - | - | 4 | 75 | 123 | 50 |
| Crane, hooks and eyes, | - | - | - | | 2 | 50 | 6 cellar " " | - | - | - | - | 3 | 00 | 18 | 00 |
| | | | | | | | 2 wood mantles, | - | - | - | - | 3 | 00 | 6 | 00 |
| | | | | | | \$4 | 8 41 2 closets shelved, | - | - | - | - | 5 | 00 | 10 | 00 |
| | | | | | | | 93 ft. of blinds, | - | - | - | - | 70 | 65 | 10 | |
| 3403 ft. timber, framed, | - | - | - | 2 | 00 | 68 | 06 24 ft. shutters, | - | - | - | - | 60 | 11 | 40 | |
| 168 joist and wall strips, | - | - | - | 16 | 26 | 88 | 410 ft. base, | - | - | - | - | 5 | 20 | 50 | |
| 170 ft. sleepers, | - | - | - | 6 | 10 | 20 | 60 ft. 3 in. leader, | - | - | - | - | 13 | 7 | 80 | |
| 1850 ft. narrow siding, | - | - | - | 5 | 92 | 50 | Painting, | - | - | - | - | | 92 | 00 | |
| 1324 ft. roofing, | - | - | - | 9 | 119 | 16 | | | | | | | | | |
| 116 feet bracketed cornice, | - | - | - | 50 | 58 | 00 | | | | | | | | | |
| | | | | | | | | | | | | | | | \$950 71 |

ESTIMATE FOR FENCES, ON PLATE 30.

| | | | | | | | | | | | | | |
|----------------------------|---|---|---|----|------|----|----------------------------|---|---|---|----|------|----|
| Fig. 1. 16 posts, | - | - | - | 18 | 2 | 88 | Fig. 4.—8 posts, | - | - | - | 25 | 2 | 00 |
| 275 ft. 2 in. plank, | - | - | - | 4 | 11 | 00 | 17 1½ in. plank, | - | - | - | 30 | 5 | 10 |
| 200 ft. 3 by 8 timber, | - | - | - | 2 | 4 | 00 | 225 ft. timber, | - | - | - | 2 | 4 | 50 |
| 8 1½ plank, | - | - | - | 30 | 2 | 40 | 4 lbs. nails, | - | - | - | 6 | | 24 |
| 140 ft. 1½ plank, | - | - | - | 4 | 5 | 60 | 125 ft. 2 in. plank, | - | - | - | 4 | 5 | 00 |
| 52 ft. ¾ in. boards, | - | - | - | 4 | 2 | 08 | 129 ft. 1½ in. plank, | - | - | - | 4 | 5 | 16 |
| 9 lb. nails, | - | - | - | 6 | | 54 | 25 ft. ¾ in. " " | - | - | - | 4 | 1 | 00 |
| Carpenter's bill of labor, | - | - | - | | 38 | 00 | Carpenter's bill of labor | - | - | - | | 30 | 00 |
| Per hundred feet, | | | | | \$66 | 50 | Per hundred feet, | | | | | \$53 | 00 |
| Fig. 2.—16 posts, | - | - | - | 18 | 2 | 88 | Fig. 5.—8 posts, | - | - | - | 35 | 2 | 80 |
| 170 ft. 2 in. plank, | - | - | - | 4 | 6 | 80 | 16 ¾ in. boards, | - | - | - | 18 | 3 | 24 |
| 143 ft. 1½ in. plank, | - | - | - | 4 | 5 | 72 | 4 lbs. nails, | - | - | - | 6 | | 24 |
| 70 ft. ¾ boards, | - | - | - | 4 | 2 | 80 | 225 ft. timber, | - | - | - | 2 | 4 | 50 |
| 300 ft. timber, | - | - | - | 2 | 6 | 00 | 393 ft. 2 in. plank, | - | - | - | 4 | 14 | 72 |
| 10 lbs. nails, | - | - | - | 6 | | 60 | Carpenter's bill of labor, | - | - | - | | 35 | 00 |
| 9 1½ in. plank, | - | - | - | 30 | 2 | 70 | Per hundred feet, | | | | | \$60 | 50 |
| Carpenter's bill, | - | - | - | | 35 | 00 | | | | | | | |
| Per hundred feet, | | | | | \$62 | 50 | Fig. 6.—16 posts, | - | - | - | 18 | 2 | 88 |
| Fig. 3.—8 posts, | - | - | - | 25 | 2 | 00 | 9 1½ plank, | - | - | - | 30 | 2 | 70 |
| 19 1½ in. plank, | - | - | - | 30 | 5 | 70 | 7 lb. nails, | - | - | - | 6 | | 42 |
| 250 ft. timber, | - | - | - | 2 | 5 | 00 | 200 ft. of wall strips, | - | - | - | 1 | 2 | 00 |
| 144 ft. 2 in. plank, | - | - | - | 4 | 5 | 76 | 200 ft. ¾ in. boards, | - | - | - | 4 | 8 | 00 |
| 143 ft. 1½ in. plank, | - | - | - | 4 | 5 | 72 | Carpenter's bill of labor, | - | - | - | | 18 | 00 |
| 5 lbs. nails, | - | - | - | 6 | | 30 | Per hundred feet, | | | | | \$34 | 00 |
| Carpenter's bill of labor, | - | - | - | | 36 | 00 | | | | | | | |
| Per hundred feet, | | | | | \$60 | 48 | | | | | | | |

Design XXXIV. will cost \$821 00; Design XXXV. will cost \$730 00; Design XXXVI. will cost \$1359 12; Grecian Cottage on page 37, \$4230 00.

THE ANGLO-NORMAN STYLE OF ARCHITECTURE.

THE principal Design in this part of our work is an attempt to adopt the cumbrous yet picturesque style, usually called the Anglo-Norman, to the conveniences of the modern Villa. The peculiar style of ornamentation which characterizes the remains of Norman buildings in England and on the continent, distinguish them in a very marked manner from the earlier and later styles of the so-called gothic architecture. The zig-zag and wavy ornaments in which the arches of doors and windows in Norman buildings abound, impart to them an effect of barbaric magnificence which may be adopted in our ornamental cottages and villas, when judiciously managed, with very pleasing results. The Norman is so called because it was introduced into England by William the Conqueror, and continued the prevailing style of Architecture for the next two hundred years, during which there was a greater rage for building magnificent ecclesiastical houses than had ever before existed, or since been known in that island. But the style was not originally Norman, it was Romanesque or Byzantine, and is variously called upon the continent by these names, and frequently by English writers is denominated Lombardic. But as the term most commonly used by English authors is Anglo-Norman, we adopt that name.

Although England abounds in remains of Norman buildings, and of the twenty-two cathedrals in the island, fifteen are partly Norman in construction, there is not one entire structure remaining which was built in that style, unmixed either with the Anglo-Saxon, which preceded it, or the early English which followed it. The general peculiarities of the Norman Style are semi-circular arches, columns of very large diameter relatively to their height, a great profusion of ornaments, and massive square towers. The intersection of the semi-circular range of arches, which it is supposed by some writers gave the first hint of the pointed arch, is peculiar to the Norman style, and was used to break up the tame masses of flat wall which necessarily occurred in their immense structures. The entrances to their churches and other buildings, were most lavishly decorated with all manner of strange devices, mouldings, wreaths, faces of men and monsters, beasts, and often with figures both indecent and revolting from their libidinous expression. But the general effects of these profuse ornaments are far from being unpleasant. It is very remarkable that even in the earliest remains of the Norman Style there are traces of the pointed arch which did not come into general use until the 13th century.

As we have attempted to adapt the Norman Style to modern domestic uses, perhaps it will be not improper to give a very brief description of those structures, built partly for residences and partly for

purposes of warfare, in which the style was first introduced into England. The Anglo-Norman castle was both a house and a fort; it was generally, indeed always, so far as we have any knowledge, irregular in form, and of great extent, surrounded by a fosse, or deep ditch, and crossed by a draw-bridge, which was defended by a wall with turrets upon it called a barbican. Between the ditch and the principal building was another wall of great thickness, and very high, with embrasures, and on the inside were constructed the buildings for the convenience of the retainers and officers of the castle. On the top of the wall, and on the tower, which was generally two or three stories high, stood the defenders of the castle in time of a siege with bows and arrows, stones and other implements to crush their assailers. Within the inner walls were the chapel, for in those days the priest and the warrior leaned upon each other as they do in ours, and the great tower, which was the residence of the owner of the castle, and in it also resided the constable or governor. This tower was generally four or five stories high, the wall of immense thickness and pierced only with very narrow slits, which could admit but little light into the dismal apartments; and as the means for procuring light by artificial means were extremely limited, we may be sure that the inhabitants of those gloomy castles led most cheerless lives. Underground, deprived of light and wholesome air were the dungeons in which prisoners were confined; and many a despairing wretch has ended his life in those grim vaults which now lie crumbling in decay, overgrown with noxious weeds, and only known to owls and bats. So, too, have the customs and memories of the men who erected, inhabited, and perished in those dismal holds gone to decay, and their very names are covered with the rubbish of the past. From the fact of the dungeons being in the principal tower, it was itself called the donjon or keep. In Dallaway's Discourses upon architecture is a very curious table, giving the dimensions of some of the principal donjons or keeps erected during the Norman era in England; the largest was that of Colchester, which was 140 feet long by 102 broad; the Tower of London, which was erected by William the Conqueror, is 116 feet by 96 feet.

Let us be grateful that we live in an age when a man's house though built of shingles is more securely defended from the encroachments of the strong oppressor, than were these immense structures of stone and timber, which, with all their defences, their barbicans, ditches and dungeons, could not protect their residents from their stronger foes. While decorating our small but cheerful houses with the picturesque remnants of these savage ages, when so little was known of the true aims of life, and when the rule of right was might, let us remember that the destiny of mankind is as far from being developed in our condition as it was in these troublous times; centuries hence there will be those who look back upon us as we now look back upon our rude ancestors of the Norman era, whose style of ornamentation we have borrowed for one of our peaceful villas.



MARINE COTTAGE.

THE little cottage of which we give a wood cut above, was built last year for Augustus W. CLASON, Esq. of Westchester. It stands upon a neck of land containing about 750 acres, known for years as Clason's Point, which juts out into the Sound at about twelve miles from the city of New York. On the west and the east the river forms two bays. The house is situate on a little swell of land rising gradually from the water, and affords one of the finest water prospects conceivable. The bay windows on the east command a view of the Sound to Whitestone, the front (the south) catches, through trees, glimpses of the water; an old wood of oaks and elms now hides and now shows the building from the west; a village, with its irregular roofs, and church spire, at a distance of some miles, bounds the view to the north; the creek, gradually narrowing from the bay, creeps slow and sinuous through the meadows, dotted at intervals with small tree-crowned hillocks, losing itself among them at last. The little streams impart that hushed and tranquil character to the landscape which gives such a charm to English scenery, and contrasts strongly with the adjacent breadth and boldness of the parent waters. The grounds contain fifteen acres, of which about five are wooded with a very old growth, and the rest lie in grass. It is intended to throw walks through the lawn and adorn their borders, but not to set apart any one spot for a garden.

This cottage combines many of the most desirable qualities of a summer residence, while it is sufficiently compact and well adapted to the exigencies of our climate in winter. It is precisely of that character which meets the wants of the greater part of those who build houses in the suburbs of our cities, and is capable of being enlarged or reduced without destroying its harmony of parts. The material of which it is built is wood, but the style is well adapted for either brick or stone. The bold projection of the roof saves the necessity for a veranda, which, on a small house, always has an awkward effect, giving it the appearance of a veranda with a house attached to it, rather than a house with a veranda. A writer in one of our agricultural periodicals, who probably had seen but few of the designs contained in the Architect, complained that the cottages were too small for the majority of families living in their own houses. But the above cottage is a refutation of the complaint, and the greater part of our designs will be found adapted to the wants of families in comfortable circumstances, and to combine whatever may be required to meet a cultivated taste in external appearance, with the economical conveniences which our habits demand.

EXTRACT FROM SPECIFICATIONS

Of Designs XXXVII. and XXXVIII.

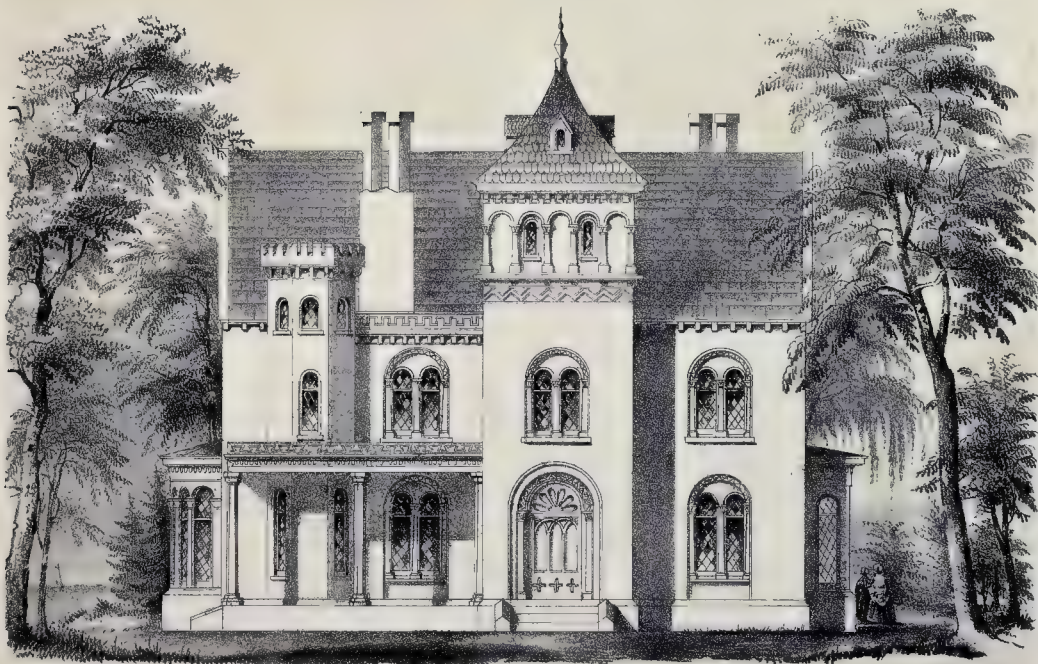
DESIGN XXXVII......Foundations and cellar walls of good quarry stone, 7 ft. 6 in. high, and 18 inches thick, laid in courses above the surface of the ground.....the water-table 8 in. high.....windowsills and chimney-tops of plain cut brown stone.....Superstructure walls of good, smooth, hard brick, laid close joints and flush.....outside doors and windows arched and recessed. The main roof covered with small slate.....the entrance tower with red cedar shingles. the octagon, square and round towers, bay windows, and roofs over the library, kitchen, and a portion adjoining the round tower, with galvanized iron and iron leaders.....cornices, parapets, corbel tables, and columns, to be made of best clear white pine, as in Plate 33. First and second floor timbers, 3 by 10.....third floor and roof, 3 by 8.....partitions, 3 by 4 joint, 12 in. between centers. Floors, in first and second story, of clear, narrow, yellow pine, all other floors of the best quality white pine. In first and second stories, the sashes 1 3-4 thick, set with crown glass, in diamond form, hung by raised cast butts, and secured by grip bolts; all other sashes 1 3-8 thick.....the frames made of plank.....the outside mouldings and arches secured to the brick work.....Interior doors, trimmings and base, as drawn on Plate 34: Sliding shutters to all the windows in first and second stories, paneled and moulded, same as the doors, and to have cast ways, brass shaves and locks.....all the locks in the house to be mortise, with porcelain knobs. Open stairs from principal floor to attic, with moulded steps, string, and skirting.....moulded rail, 5 in. by 2 1-2, and 2 1-2 moulded balusters.....rail and balusters of black walnut, polished. All the woodwork, outside and inside, except shingles, floors, rail and balusters, to have two good coats of pure white lead and oil, and a third coat of light brown on the outside, and a very light tint of drab, on the inside.

DESIGN XXXVIII......Excavations 4 1-2 feet deep. Cellar walls of stone 18 in. thick and 7 ft. high.....one chimney with four fire-places (including one in the cellar.....to be finished into rooms if required).....outside walls filled in with brick on the edge. Marble mantle in the parlor.....blue stone hearths in the kitchen and chambers. Three coats plastering, hard finished. cornices in the parlor and porch. Frame of second timber.....the sills, posts and plates, 4 by 9.....interstices, 4 by 6.....first tier of beams 2 by 10.....second tier, 2 by 9, 16 in. between centers.....rafters, 3 by 6, and collar beams, 2 by 10, 30 in. apart.....studding, 3 by 4, 16 in. between centers. Sides covered with narrow, clear tongued and grooved plank, the joints filled with white lead and blind nailed. The roof covered with best cedar shingles, three thick, on oak lath.....the cornices, parapet and exterior mouldings the same (less size) as for Design 37.....Floors of best pine plank. Sashes, 1 5-8 thick, set with double thickness American glass, and hung by butts to proper frames, and secured in the first story by French grip bolts, and in second story by latches and bolts.....cellar sashes, 1 1-4 thick, hung by butts and secured by bolts.....Doors, 1 1-2 inches thick, in first story, and 1 1-4 thick in the second, all 7 ft. high, 2 panels, moulded both sides, with plain



ANGLO NORMAN VILLA.

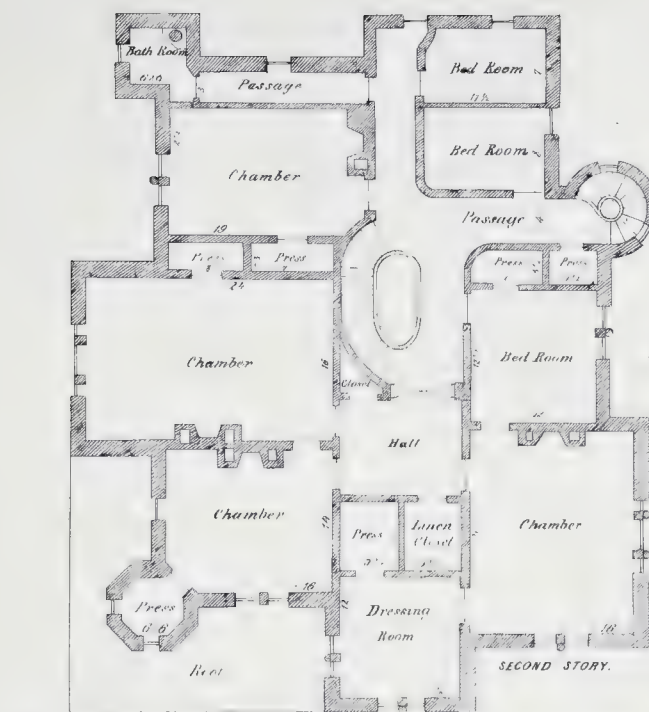
Lawn Front.



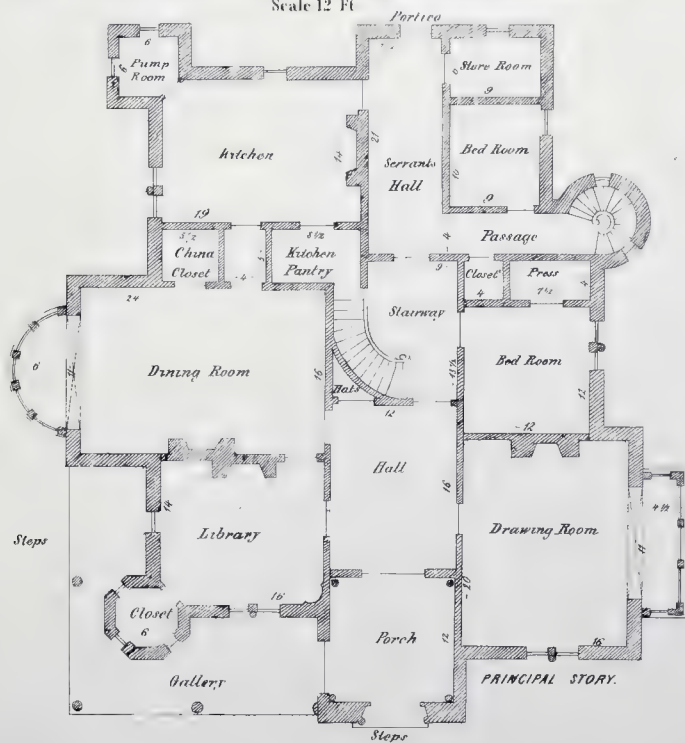
Designed & Drawn by Wm. H. Ranlett

Mayer & Son, Lith. 93 William St. N.Y.

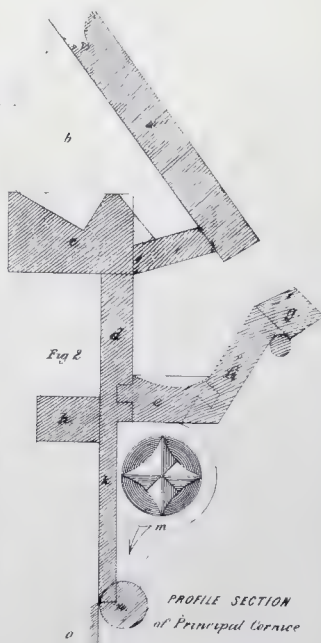
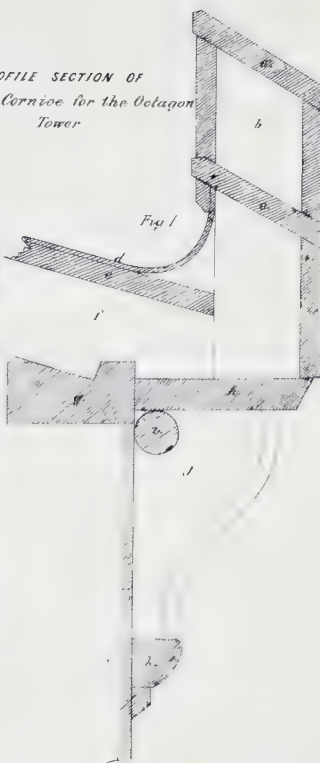
Entrance Front.



Scale 12 Ft

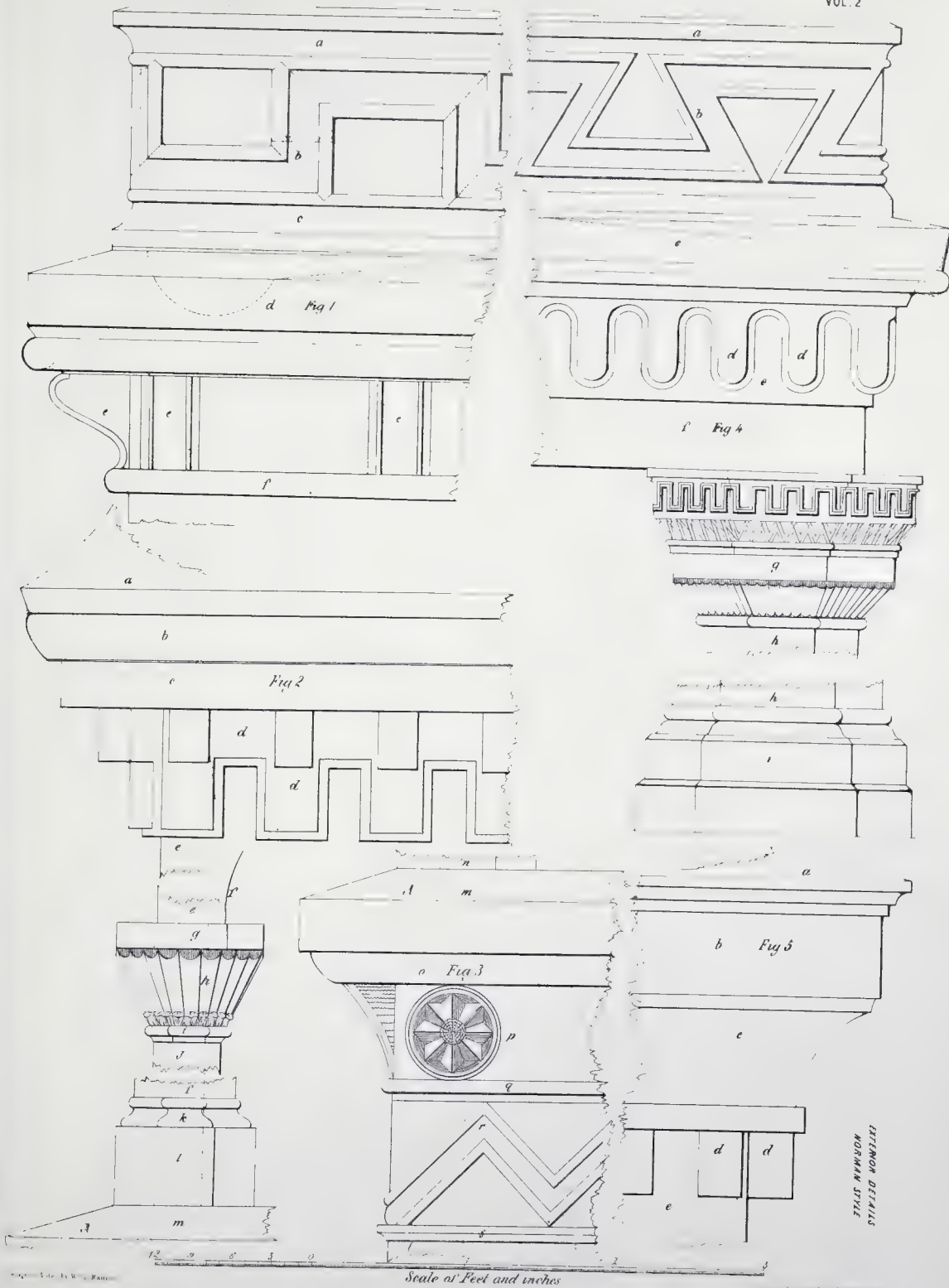


PROFILE SECTION OF
the Cornice for the Octagon
Tower

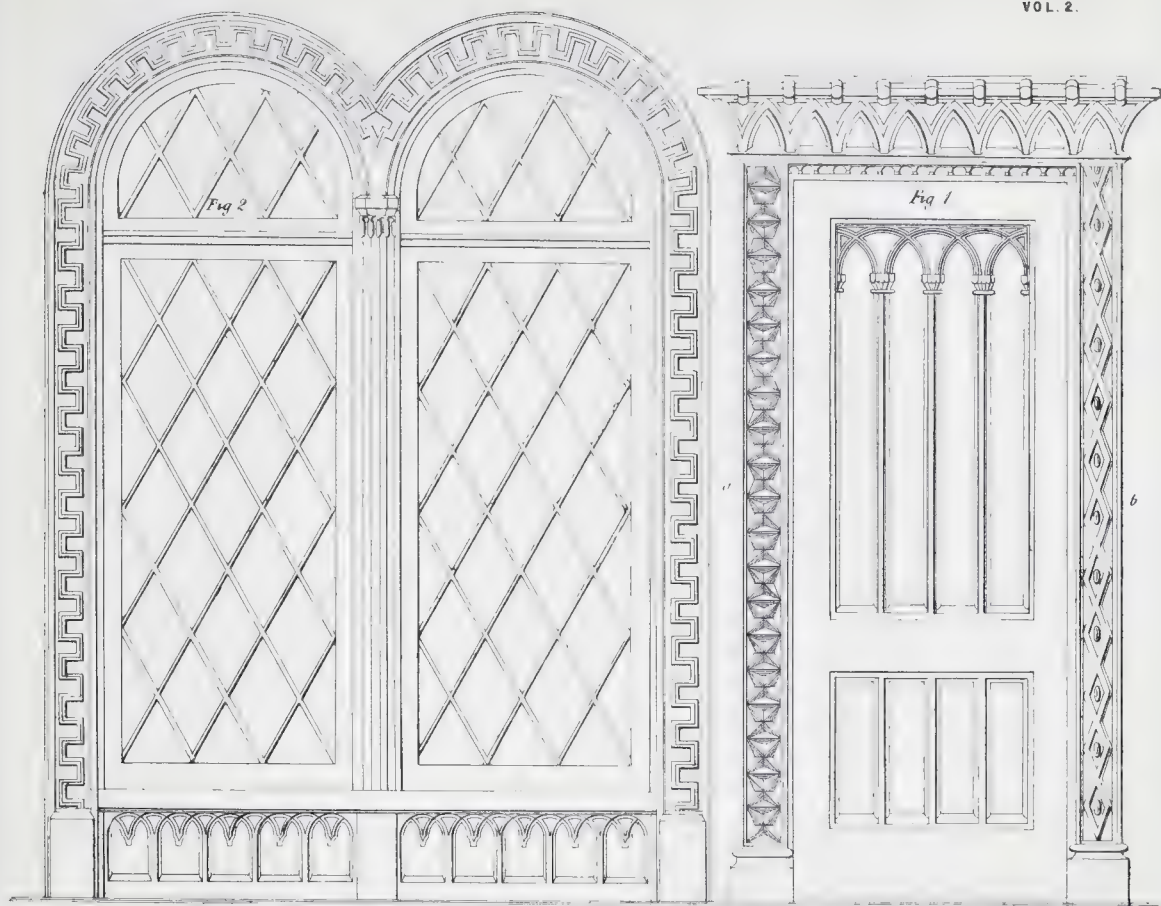


PROFILE SECTION
of Principal Cornice

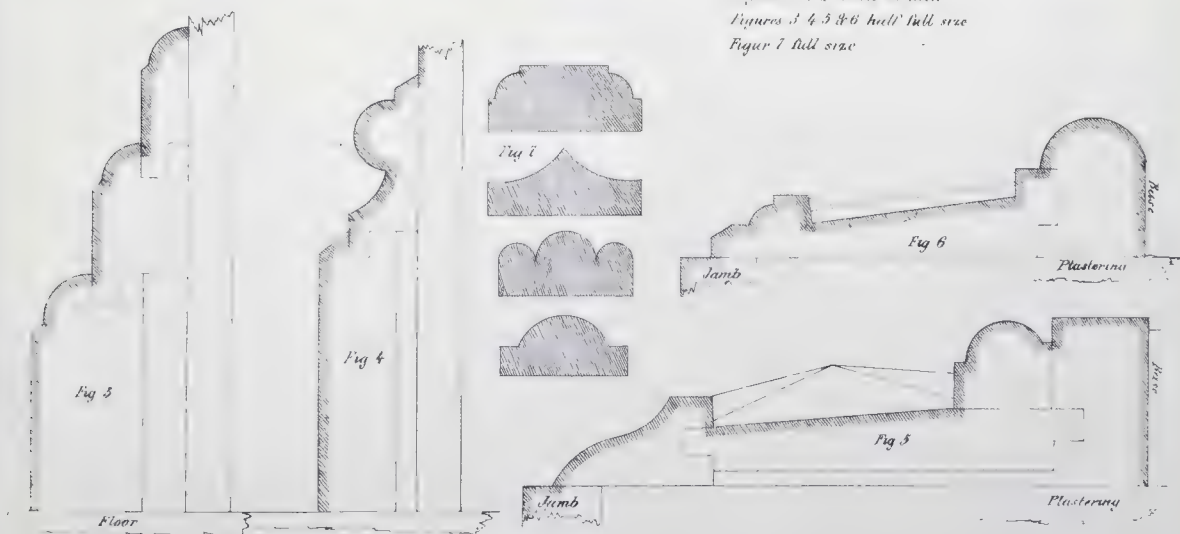
Scale as on Plate 33



NORMAN DETAILS



Figures 1 & 2 scale $\frac{1}{4}$ inch
 Figures 3 4 5 & 6 full size
 Figure 7 full size



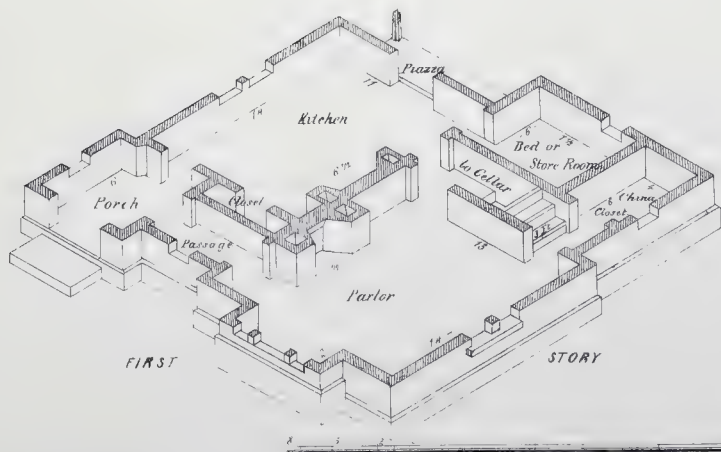
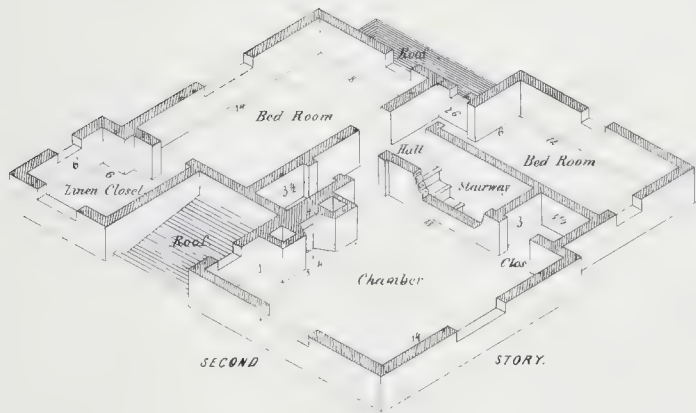
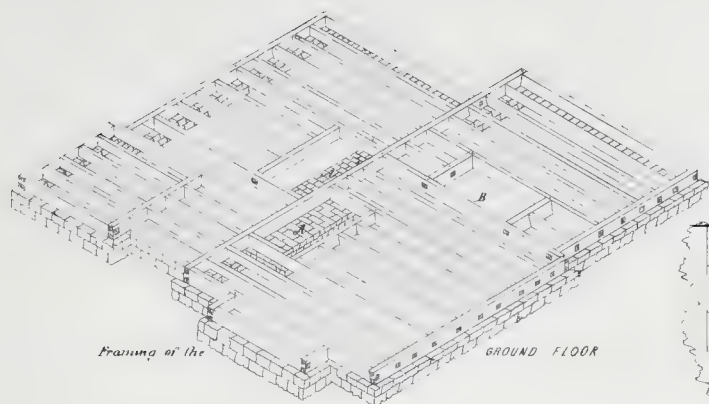


COTTAGE VILLA
in the Anglo-Norman Style

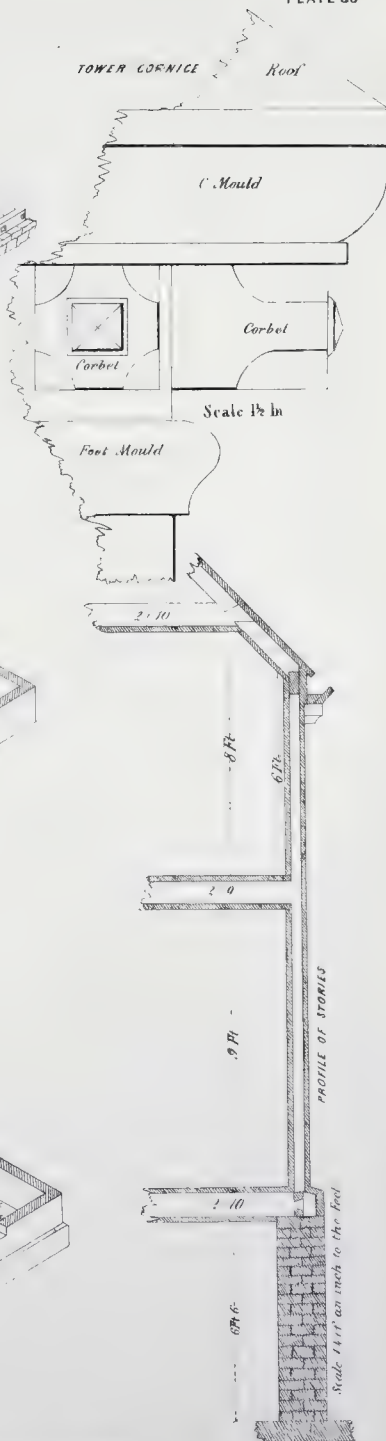


ENTRANCE ELEVATION
design XXXVIII

GARDEN ELEVATION.



Scale 8 Ft



arched heads, in first story, hung by best cast butts, and secured by mortice locks, with light mineral knobs
 ...beated canvas wall the doors and windows. . . . Base, 7 in high moulded. . . . Stairs closed on both
 sides by room partitions . . . open steps to cellar. . . . Painting. . . . 2 coats with white lead and oil, the outside
 shaded a light greenish drab; the inside, buff color.

DESCRIPTION OF THE PLATES.

PLATE 31.—Design XXXVII. Geometrical elevations of the lawn and entrance fronts of a Villa in the Anglo-Norman style of architecture. This villa has been designed for Doct. Samuel M. Elliot, of Staten Island; the site on which it is to be erected is one of those elevated ridges of land on the north side of the Island, sloping so gracefully to the river, and embracing some of the most beautiful views of country, harbor and river scenery.

PLATE 32.—Design XXXVII. Ground plans of the first and second stories, with descriptions and dimensions of the rooms and profile sections of cornices. Fig. 1, for the octagon tower—*a*, merlin cap; *b*, embrasure; *c*, embrasure cap; *d*, iron roof; *e*, plank; *f*, rafter; *g*, plate; *h*, plancere; *i*, bed mould; *j*, bracket; *k*, foot mould, *l*, wall. Fig. 2, principal cornice—*a*, roofing; *b*, rafter; *c*, plate; *d*, gutter back; *e*, bottom; *f*, front and *g*, the cap mould; *h*, nailing joist; *k*, frieze; *m*, truss bracket; and *n*, foot moulding.

PLATE 33.—Design XXXVII. Exterior details. Fig. 1, parapet and cornice to receive the iron roofing—*a*, cap mould of the parapet; *b*, embattled fret; *c*, base; *d*, cornice; *e*, *e*, *e*, truss brackets; *f*, foot bead. Fig. 2, cornice, column and corbel table for the entrance tower—*a*, roof; *b*, crown moulding; *c*, and *d*, label corbel table; *e*, *e*, and *f*, arches; *g*, abacus; *h*, round reeded cap; *i*, astragal; *j*, round shaft; *k*, base mould; *l*, and *n*, base. Fig. 3, *m*, *a*, *p*, *p*, corbel table; *q*, foot bead; *r*, zig-zag fret mould; *s*, foot moulding, and *t*, wall. Fig. 4, column, cornice and parapet for the piazza—*a*, cap of the parapet; *b*, triangular fret; *c*, cornice; *d*, *d*, nebule moulding; *e*, frieze; *f*, fascia; *g*, ornamented and moulded cap of the column; *h*, *h*, octagon shaft; *i*, base. Fig. 5, cornice for the round and water towers—*a*, roof; *b*, cornice; *c*, bed mould; *d*, *d*, blocks, and *e*, wall.

PLATE 34.—Design XXXVII. Interior detail. Fig. 1, elevation of a door and trimmings for the first story; Fig. 2, elevation for a window for the first and second stories; Fig. 3, base for the first story; Fig. 4, base for the second story; Fig. 5, architrave for the first story, and Fig. 6, for the second story: *a*, Fig. 1, star moulding for the doors and windows in drawing room, dining room and hall; *b*, diamond moulding for the doors and windows in porch, library and stairway; the fret moulding, in Fig. 2, for the windows and doors in principal rooms and hall in second story; Fig. 7, sections of the fret moulding.

PLATE 35.—Design XXXVIII. Perspective view and two geometrical elevations of a cottage villa, in the Anglo-Norman style of architecture, designed for, and to be erected on a plot of $3\frac{1}{2}$ acres of ground near the site for Design XXXVII.

PLATE 36.—Design XXXVIII. Geometrical ground plan of the first and second stories—representing in a familiar manner the location and dimensions of the rooms; a framing plan of the first floor; a geometrical section of the tower cornice and profile section of the heights of stories.

THE COLOR OF HOUSES.

House painting is not usually reckoned among the Fine Arts, but it requires the eye of an artist to select the best tint for a habitation; fashion generally decides the point for the majority of people, but it is the decision of the artist that sets the fashion. In a country like ours, where wood forms the chief building material in the rural districts, and paint must necessarily be used as a preservative, it is of great importance that those who do not possess the faculty of discrimination in colors should know what pigments will answer the best purpose for beautifying as well as preserving their dwellings. Alison in his ridiculous treatise on the sublime and beautiful, says that no tint is beautiful in itself; but that color depends altogether upon the associations connected with it for the sensation which it produces, by which he proves himself as unqualified to write upon the subject as a blind man. All colors are not only beautiful but alike beautiful; if any one doubts this let him look at a rainbow and decide which tint gives him the most agreeable sensation. The Greeks painted their marble temples in polychrome; and, at a little distance, their fluted columns must have had the appearance of upright rainbows. In all countries, where the habits of the people are primitive and the atmosphere is pure and transparent, the people have delighted in the use of brilliant colors; as witness the temples of the Greeks, the pagodas of the Chinese, the mosques of the Turks, and the dwellings throughout India and the East; in our own country towns, the favorite colors for houses are white, green and red; but in our cities where the practice prevails of copying after English models, there has been a fashion of late years of painting houses the dull and sombre hues which characterize English dwellings, and which are well adapted to the cloudy atmosphere of the British Islands. The use of red sandstone has lately led to nearly all the houses in the vicinity of New-York being painted a dirty chocolate color, whether built of brick, wood or granite. It is a ridiculous custom, for although the tint of red sandstone is very far from being disagreeable to the eye, yet the attempt to imitate it by a mixture of colors must necessarily be unsuccessful, from the paint presenting a glossy surface. To obviate this defect a custom prevails of powdering the fresh paint with fine sand, which produces a very pleasant effect at first; but the rain soon washes off the sand and leaves a wretched poverty-stricken aspect to the house. The better way, in painting a house, is not to attempt to imitate any particular material, but to beautify it by giving it a cheerful and pleasing appearance. For this purpose some light and bright colors are necessary; such as will wear best should have the preference. A pure white relieved with green blinds, at one time was almost universal, but the effect is too glaring when new, and when weather-stained and old it has a very shabby and cheerless look. A slight tinge of green, yellow or red, produces the pleasantest tints for country houses. Lead color is very objectionable for a house, as it almost neutralizes the effects of shadows, without which there can be nothing picturesque in the appearance of a building. That part of a house which remains in shadow should always be painted a warm bright tint, let the other parts of it be colored as they may. As a dwelling-house should always be made to wear a cheerful and comfortable aspect, this matter of color is of much greater importance than, at the first glance, may generally be supposed the case; and therefore, those who have not the faculty of distinguishing colors and are consequently indifferent to their effects, should not venture to exercise their own judgments, but seek professional advice in such matters. A dark green is an extremely pleasant color to the eye when we look upon a meadow or a forest, but a house painted such a color would be hideously ugly; yet a house covered with ivy, or any other green vine is one of the pleasantest sights that the eye can rest upon. It is not, therefore, the color that is objectionable, but the fault is in the pigment and the evenness of surface which the smooth paint presents. When a house is covered with green leaves, the surface is broken up by an infinite number of shadows and glancing lights, which prevents the glare occasioned by a broad unvaried surface. For the same reason any other bright positive color, would be equally objectionable. A soft neutral tint will always be found the most grateful to the eye when it is spread over a broad smooth surface. But if any one should have the courage to attempt the decoration of his house after the manner of the Greeks in the time of Pericles, when Grecian Art was at its perfection, by polychromatic coloring, it would be better to use positive tints, as red, blue, orange and purple.

The interior of a house should always be painted of a warm neutral tint. Pure white is too cold and cheerless for a dwelling room, and is, moreover, so liable to stains, that its appearance of purity and cleanliness, which is a great recommendation with neat house-keepers, very soon wears off. But we shall reserve our remarks on the painting and decorating of the interiors of houses for a separate chapter.

The purity of our atmosphere, and the absence of coal smoke, admit of houses being painted a pure white, and, where lead and oil are alone used in the open air, the color will grow whiter from exposure; but in the interior of a house it will become a dingy yellow from being deprived of light and air. White lead improves by age and should not be used for wood work unless at least a year old; linseed oil also becomes purer and better from age, and should be at least two years manufactured before used. Much harm results from the employment of incompetent workmen in the painting of houses, as from their inexperience in mixing paints, and their inability to distinguish between good and bad materials, the employer often throws away his money, and defaces the appearance of his house in the attempt to beautify it by a coat of paint.

In painting a house any light color particular care should be taken to *kill* the knots in pine wood, as it is technically termed, or the effects of the first painting will be greatly marred. The best method of destroying the turpentine contained in pine knots is by spreading upon them freshly slaked lime which will effectually burn it out. After this has been done the knots must be covered with a sizing composed of red and white lead and glue.

In painting the outside of a house there should be no turpentine mixed with the paint, excepting in the case of white paint, and then only in the last coat, not more than one part turpentine to four parts oil should be used, as oil has a tendency to discolor white.

White lead forms the basis of all pigments for house-paintings excepting black, which is generally composed of lampblack; but a new mineral substance has recently been discovered in New Jersey, which forms a beautiful jet black, and resists the action of the atmosphere and water, better than any paint yet made. It has already been extensively used on ships, and will probably entirely displace every other kind of black paint before long. Not much black paint is ever used on houses, although it is most extensively employed for fences and iron-work; and as it is important to use a material that will resist the action of the atmosphere in ornamental iron-work, which is so soon destroyed by rust, the discovery of this new mineral pigment is a matter of importance to builders. We have seen some specimens of this new paint, which were remarkable for brilliancy of color and hardness of surface. A steam mill has been erected for manufacturing this article, and we shall be able to give more definite information respecting it before we conclude our remarks upon this subject.

There is no style of building in which polychromatic coloring could be introduced with finer effects than that of the Anglo-Norman, of which Designs XXXVII. and XXXVIII. offer good examples. The zig-zag ornaments in this style, painted of some bright color and relieved by a dark back ground, would produce as rich effects as the ornamentations of a Moorish palace. A country house painted in this manner would harmonize admirably with the gorgeousness of our parti-colored forests in Autumn. The singularly beautiful effect of a cottage covered with woodbine, when the leaves have been turned to bright crimson and orange tints by the first frosts of October, must have been noticed by those who have an eye for the dazzling beauties of bright colors. Something like this could be produced by painting a house in polychrome.

Rudely constructed country houses, whether of stone or wood, and barns and other out houses, may be greatly improved in appearance by a coat of whitewash, which has the double effect of preserving the wood while it beautifies it; a very pleasant tint may be produced by mixing a little yellow ochre in the white wash. But unless buildings are whitewashed at least once a year it would be better to leave them bare, for nothing can look more neglectful and shabby than a building with the white wash half peeled off.

It is difficult to give particular directions on a point like that of the color of houses, which is, after all a matter of taste, and we offer these hints not for the benefit of those who have any taste of their own, but for those who have not, who, we are forced to believe, form a very large class of the people. In such matters that which pleases best is the best and we would advise every one to think more of pleasing himself in the decoration of his house than of conforming to the fashion, or to the dicta of any self-established arbiter in the art of living.

The colors and tints proper for house-painting, such as browns, drabs, yellows, pea green, greys, and imitations of stone color are made by mixing, with white lead and linseed oil, the following colors, which should first be finely ground in oil.

DRABS—Chrome yellow, lampblack and red; or Venetian red and burnt umber, with white.

BROWN STONE COLOR—Spanish brown, chrome yellow and lampblack, " "

GREY STONE—Lampblack and Venetian red, " "

FRENCH GREY—Indian red, Chinese blue and ivory black, " "

SAGE COLOR—Raw umber, Prussian blue and Venetian red, " "

SLATE COLOR—Black, and Venetian red, " "

DARK BLUE—Prussian blue, " "

SKY BLUE—Ultramarine or Prussian blue, " "

VIOLET—Vermilion, blue and black, " "

LILAC—Drop black, ultramarine and crimson lake, or Indian red, " "

PEACH BLOSSOM—Carmine and ultramarine, " "

ROSE COLOR—Crimson lake and vermillion, " "

SALMON COLOR—Chrome yellow and Indian red, or burnt sienna, " "

STRAW COLOR—Yellow ochre and orange chrome, " "

BUFF COLOR—Venetian red and yellow ochre, " "

PEARL WHITE—Ultramarine, crimson lake, and ivory black, " "

FRENCH WHITE—Indian red, ivory black, Chinese blue, or ultramarine, " "

FAWN COLOR—Yellow ochre and Spanish brown; or V. red, blue and umber, " "

PEA GREEN—Yellow and blue; or chrome green, " "

GREEN—Prussian blue and chrome yellow.

OLIVE GREEN—Chrome yellow and black; or raw umber and blue.

BRONZE GREEN—Black and green, or chrome yellow and black.

ORANGE—Chrome yellow and vermillion.

CHOCOLATE—Spanish brown and black; or Venetian red and black.

There are various other modes of producing the above shades, but simplicity and economy are the objects we have in view. The gradation of shades produced by a varied proportion of these colors is almost indefinite.

Small quantities of the coloring-matter should first be added to the lead, and continued till the right shade is procured. Enough should be mixed at one time to cover all the wood-work required with one coat.

ESTIMATE

Of the Materials and Labor required in the erection of Design XXXVIII.

| | | | | | |
|---|--------|--------|--|-------|-----------|
| 117 cubic yds. excavation, - - - | 10 | 11 70 | 1184 super. ft. floor and roof (for tinning), | 4½ | 53 28 |
| 1234 cubic ft. stone work, - - - | 10 | 123 40 | 1014 " ft. of partition, - - - | 1½ | 15 21 |
| 2550 hard brick, laid, - - - | 10 00 | 25 50 | 100 lin. ft. bridging, 3c.; 40 super. yds. furring, 25 | | 13 00 |
| 3000 salmon " " - - - | 8 00 | 24 00 | 1 large bay window frame and sashes, - | | 30 00 |
| 5724 soft, " " - - - | 6 00 | 34 34 | 6 double " " " " - | 18 00 | 108 00 |
| 475 yds. plastering, - - - | 25 | 118 75 | 10 single " " " " - | 10 00 | 100 00 |
| 83 lineal ft. plaster cornice, - - - | 25 | 20 75 | 5 cellar " " " " - | 3 50 | 17 50 |
| 5 window sills, - - - | 40 | 2 00 | 1 front door complete, - - - | | 25 00 |
| 12 feet kitchen hearth, - - - | 16 | 1 92 | 10 doors in first story, - - - | 10 00 | 100 00 |
| 1 chamber " " - - - | | 2 50 | 6 " " second " " - - - | 7 50 | 45 00 |
| 1 marble mantle, - - - | | 20 00 | 360 ft. base, 6c.; 2 wood mantles, 3 00, | | 27 60 |
| 140 joist, - - - | 18 | 25 20 | 15 steps and risers, - - - | 1 25 | 18 75 |
| 4100 super. ft. timber, framed, - - - | 2 00 | 82 00 | 12 steps to cellar, - - - | 75 | 9 00 |
| 1696 " ft. siding, 6c.; 908 ft. shingling, 11c. | 201 64 | | Painting, - - - | | 103 00 |
| 73 " ft. tin roof, 9c.; 64 ft. 3 in. leader, 13c. | 14 89 | | | | |
| 180 lin. ft. level and raking cornices, - | 60 | 108 00 | | | |
| | | | | | \$1481 93 |



WYNNE TUN.

THE above cut is a view of the seat of E. Bement, Esq., on the north side of Staten Island, near New Brighton, and is a good instance of the fine effects that may sometimes be produced, by a moderate outlay, in altering a commonplace dwelling-house into a well arranged and spacious villa. The main body of the house is one of those convenient and roomy structures of two stories, with a mansard roof, which were the beau ideal of a country house some twenty five or thirty years since, in the neighborhood of New York. There are numbers of them still remaining in good repair, built upon commanding situations, which require but slight additions to make them imposing in appearance and equal in conveniences to the finest villas that have been erected during the past ten years. The tower, which connects the out house with the main building in the above design, adds greatly to the architectural effect, and furnishes a series of convenient apartments besides affording a look-out which commands a prospect of unsurpassed beauty. The various plans which might be adapted to one of these plain houses are innumerable; by the addition of a tower, a veranda and an extension of the roof, a very ordinary looking mansion may be converted into a beautiful and picturesque villa. Of course it is necessary in such cases that the alterations should conform to the position of the house, and the character of the surrounding scenery, and it will, therefore, be impossible to furnish any general rules by which the builder can be governed. Although a fine villa may be erected any where, by those who have taste and means, yet there are few who have the good fortune to possess a situation which combines so many of the requisites and natural advantages for a country seat, as distinguish the residence of Mr. Bement. Although within a half hour's sail of New York, it is in the midst of one of the loveliest rural neighborhoods that the country can boast of, and without being subjected to any of the annoyances of a great city, it is so situated as to be within the reach of all the advantages of a busy metropolis, and the evidences of close contiguity to a teeming commercial mart such as ships, steamboats and the thousand various water crafts that carry freight, float noiselessly past, and enliven the scene without disturbing it. The villa stands on the bank of the river, or Kill van Kull, near to the water, and is relieved by a back ground of orchards and distant hills. In the vicinity of New York which abounds in charming situations and picturesque views it would be difficult to find a spot in which there is so much to admire and so little to disapprove.

CHEAP HOUSES.

IN these days of rapid movements, when emigrants to new countries carry their dwellings with them, all prepared, like a four-post bedstead, to be put up and occupied whenever they come to a suitable spot for founding a new empire or a new city, plans for cheap houses, that may be erected in a hurry, and afterwards ornamented at leisure when the prime necessities of life have been duly provided, are, of course, often called for. It is to meet the exigencies of such a condition that we have determined to devote this number of the *ARCHITECT* to plans for impromptu Cottages which shall combine all the requisites for health and comfort in a new settlement, and yet be sufficiently durable to be improved, ornamented, and beautified when time and means will permit. A house may be large, costly, and imposing in appearance, and yet be ill-contrived and uncomfortable; or it may be small in dimensions, plain in appearance, and yet so arranged as to be both convenient and durable. On Plate 38 we have given four designs for cheap Cottages, two of them perfectly plain, and two with simple but becoming ornaments. Designs XLI. and XLII. are for two small houses, intended to be built of the cheapest materials, and so framed that they may be transported any distance, either by water conveyance or railroad. The two Cottages below are the same buildings with a few simple external additions, which so change their appearance that they seem to be dwellings of a very different character. Houses, like men and women, may be dressed up and made to look genteel and elegant, without changing their intrinsic merits materially; the changes in the Cottages in Designs XLI. and XLII., however, do materially improve their character; in these Designs by adding the dormer windows, the garret chambers are made more light, roomy, and cheerful; the projecting roof casts a cooling shade in summer, and affords a protection against the beating winds and rains of winter, while the porch to the door gives a shelter from both heat and cold, and furnishes an agreeable resting-place in the cool of the evening. The eye at once discovers the utility and the beauty of the improvements, but as shelter is the prime object that must first be secured in a new colony, the ornamentation can be attended to afterwards; but it should not be neglected whenever opportunity will permit. It happens, unfortunately, that in new settlements the importance of beautifying houses is neglected a long while after the means and opportunity render it easy.

Cheap houses must, of course, be built of cheap materials, and the cheapest materials are generally those that can be obtained from the soil where the building is erected, whether of clay, stone, or wood. Much attention has recently been given to the subject of sun-dried bricks, called, by the Spanish Mexicans, *adobies*; these were the primitive materials of the earliest structures of which any remains have been discovered, and their fitness and durability are proved by their early use and their immense duration. In the excavations made by Mr. LAYARD, recently, at the long lost city of Nineveh, he discovered sun-dried bricks which had been used in building more than three thousand years ago. It is remarkable that a material

which almost every soil will furnish, and which can be so readily employed, and will endure so long, should have been so little used by the squatters and settlers of our new territories. The Hon. JOEL R. POINSETT, formerly our minister at the capital of Mexico, stated that he saw buildings of sun-dried brick in that country which had been erected over three hundred years, and were still in good order; in different parts of the United States, Canada, and the north of Europe there have been many buildings erected of this simple and easily-obtained material, which have proved much superior even to buildings of burnt bricks. As the process of burning clay renders it porous, it consequently absorbs a much greater quantity of water than the sun-dried bricks, which are, therefore, much preferable on account of their dryness in wet weather.

As the manner of making the sun-dried bricks is so extremely simple, and the materials of which they are composed can readily be obtained, it will be an important item of information with the settler in a new country to know how to procure the means of building himself a substantial house.

Any soil will be found suitable for making bricks to be dried in the sun, except sand or gravel, and can usually be obtained in making the excavation for the cellar of a house. A proportion of two parts clay or loam, to one of sand or fine gravel, and of straw about one hundred pounds, cut in lengths of five or six inches to three hundred and fifty bricks; the clay should be removed to a level spot, and mixed by treading with oxen or horses, which can be done in two or three hours. A better material even than straw, to mix with the clay when it can be obtained, is salt hay, on account of its toughness and durability. We have seen it used in mixing mortar in the place of hair.

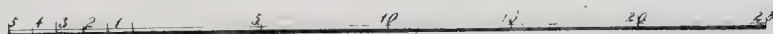
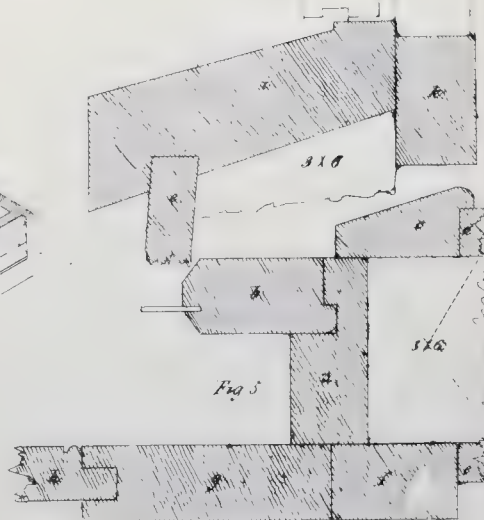
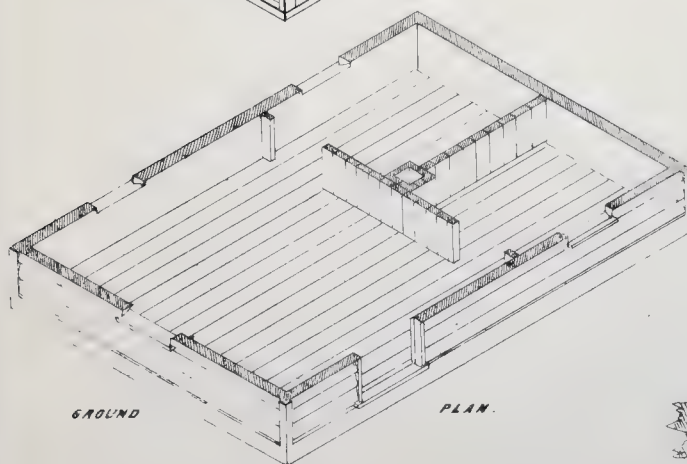
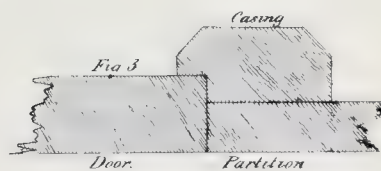
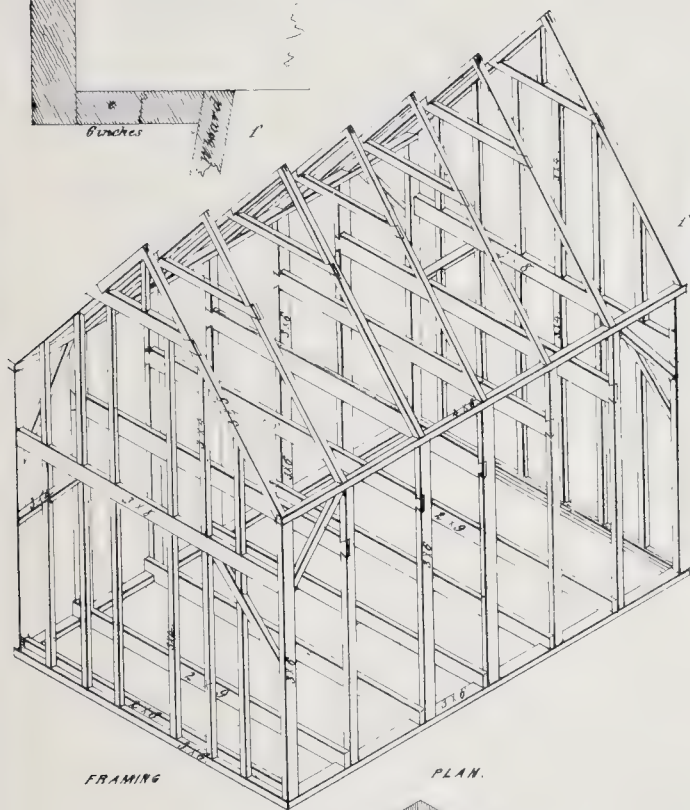
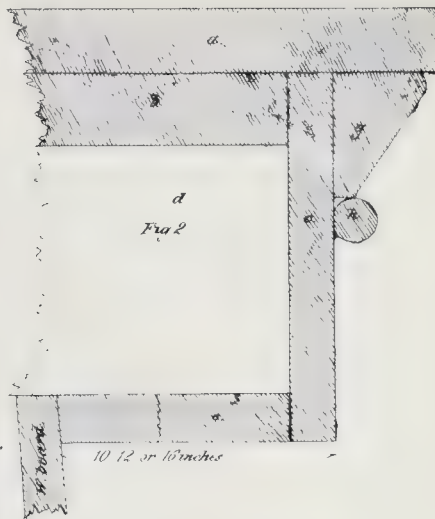
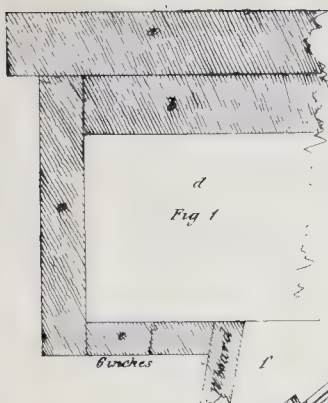
The moulds for the bricks should be made of boards, strongly fastened at the corners, and holes bored in the bottom to facilitate the discharge of the brick; when placed to dry, the bricks should be laid upon their sides, and dry sand sprinkled upon them to prevent them from cracking in the sun; in two or three days turn them upon the edge, and let them remain three to five days, according to the power of the sun, when they should be piled up so as to admit of a free circulation of air, and protected from the rain. In two weeks they will be fit for use. If a cellar is to be made, the wall should be of stone, and two feet of the top laid in lime mortar or cement; the latter would prevent dampness. In laying the bricks, clay mortar may be used, but mortar of lime and sand would do better. The roof should, in all cases, project from two to four feet, according to the height of the building. If one or two full stories, the roof may be flat, but if a story and a half it must be high to relieve the lateral pressure on the walls. The coating or plastering on the outside of the walls should be of the best description; it may be made of equal parts of lime, ashes, sand and clay, and thoroughly mixed with water, having a strong infusion of glauber salts.

Another good plastering composition, preferable, perhaps, to the above in a climate where the saline atmosphere will effect the walls, can be made as follows: to ten gallons of water add a peck and a half of rock salt, boil it and skim off the impurities, then take a peck and a half of unslacked lime, slake and sift it and put it into the hot brine; to this add two pounds of alum, one pound of copers, a pound and a half of pearlsh, and one peck of clear sand.

The house proper, deserves more care and calculation in its structure than a packing-box. It is the case in which a man places the objects that are dearest to him, in which he shuts himself from the world to enjoy that portion of it which he can call his own; it is his sanctuary in time of trouble, his retreat from oppression, the scene of his first struggle for life and his last glimpse of the world; surely, if a man may be pardoned for bestowing his affections, and devoting his time to the beautifying and perfecting of any sublunary object, that object is his house. In old times, when men had but an imperfect knowledge of the earth they inhabited, and their means of transportation were slow, expensive, and uncertain, wherever they built they expected that they and their children would dwell forever; the men who hewed their habitation out of the solid rock, could have anticipated neither a change of residence or circumstances; repairs, to them, were things never dreamed of; and alterations were unknown; progress was an idea which had not then entered the thoughts of mankind, and, in building, their instincts hardly soared above those of the beaver. It has taken the world a weary long while to learn the art of adapting themselves to their circumstances, and even now much remains to be learned; it is to supply some of the deficiencies of thought which still exist in respect to the adaptation of men's houses to their altered habits, that we have undertaken to publish the ARCHITECT.

There have been numberless works published on Rural Architecture, but none, that we are acquainted with, have been published on City houses; yet no one will deny that there is sufficient room for architectural improvement in the streets of our cities, where faults of taste are more obtrusive than in the country, and errors in the principle of construction are attended with greater evils. The sanitary condition of the inhabitants of towns depends in a great degree upon the construction of their dwellings, and the mistakes committed by ignorant builders have been the cause of a disastrous waste both of life and property. There has been a manifest improvement in the facades of street blocks during the past ten years, and in some cases, there have been examples of a refined taste and an inventive genius in the construction of private dwellings, which give indications of a new school of architecture which may with propriety be denominated the American. But, in the common houses of the retired streets, we have seen but little improvement; the smaller class of dwellings, designed for men of moderate means, which seem to be regarded as beneath the legitimate care of the professed architect, are susceptible of being greatly improved, not only in external beauty, but in the arrangement of the interior. It is our design to furnish plans for the construction of houses of this kind, as well as those of a more costly description; and when the series upon which we are now engaged shall have been completed, we shall commence another series, in which Street Architecture, or town houses, will be treated of in a popular manner, and adapted to the residences of the middle class.

The "STREET ARCHITECT," will contain, besides plans of single houses, and for large blocks, designs for shop fronts, stores, club-houses, and every other description of building, except churches, adapted for city use.





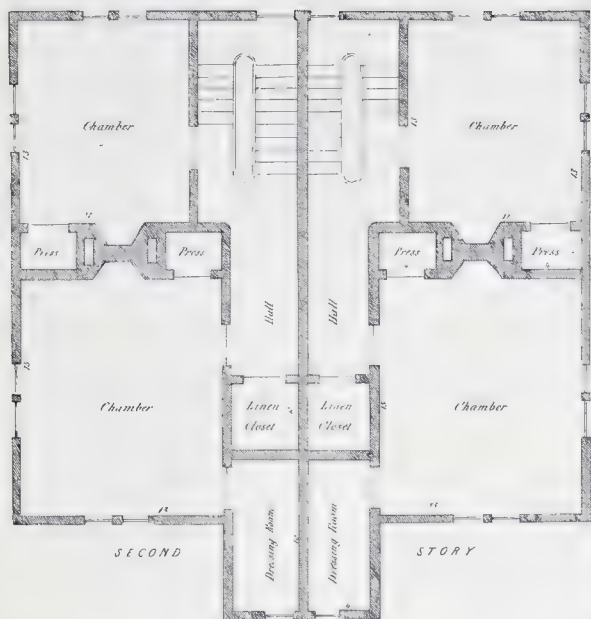
TWO PLAIN COTTAGES.

DESIGNS XLI & XLII.

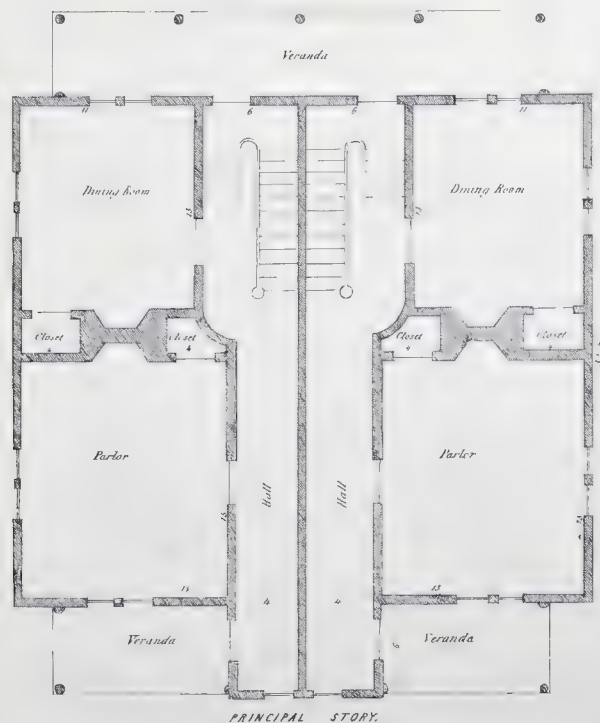


THE SAME ORNAMENTED.

DESIGNS XL, XLII & XLIII.

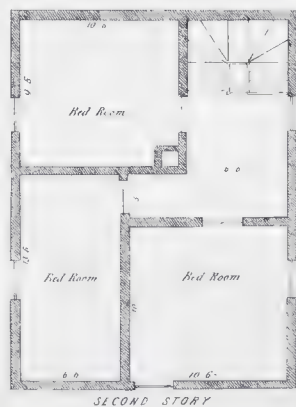


DESIGN XLIII



Scale 1" = 10'

PLATE 39
VOL. 2.



DESIGN XLI & XLII.

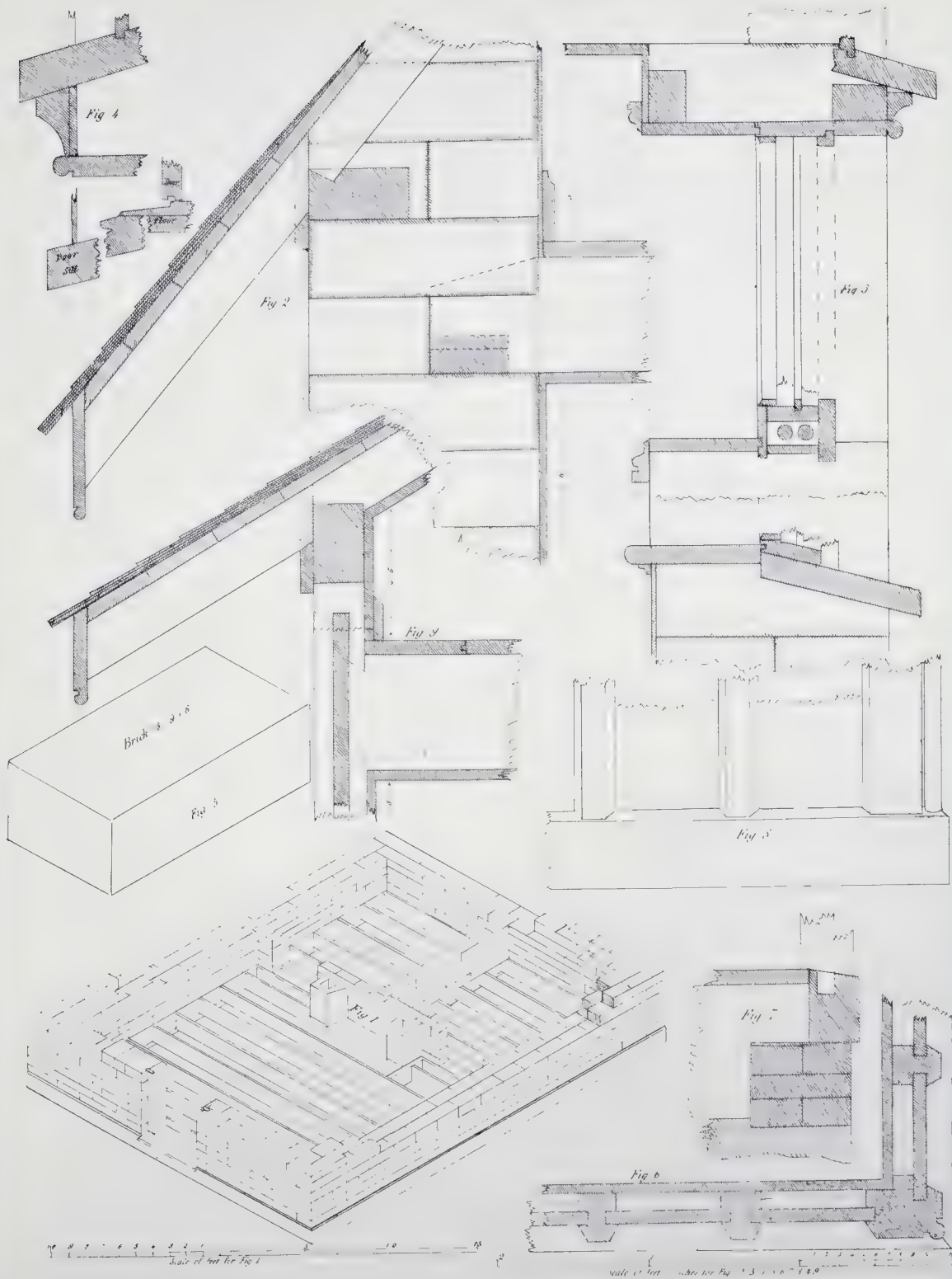




FRONT ELEVATION



ENTRANCE ELEVATION



DESCRIPTION OF THE PLATES.

PLATE 37.—Design XXXIX. Isometrical plans, frame and detail sections of a cheap house, which may be erected as follows: timber of any kind, sawed and put together strong, as represented in framing plan, sided with common boards, rabbited and laid 8 inches to weather. Roof covered with split shingles, laid 3 thick, on rough boards; barge boards, $4\frac{1}{2}$ in. wide, laid close to the siding, or project 6 inches, as in Fig. 1, or 12 inches and moulded, as in Fig. 2—*a*, shingles; *b*, roof boards; *c*, fascia; *d*, bracket; *e*, plancere; *f*, rafter; *g*, *h*, moulding; 6 windows, 8 lights each, 10 by 12 glass, sashes, $1\frac{1}{2}$ thick, hung by butts and secured by short bolts; panel shutters to the outside, hung and secured to frames. Figs. 4 and 5—*a*, jamb; *b*, *h*, sash; *c*, *e*, moulding; *d*, lining; *e*, *e*, siding; *f*, hang stile; *g*, *g*, shutter; *h*, panel; *i*, sill; the first floor is divided into three rooms, by partitions made of boards, tongued and grooved, and planed both sides; doors each 4 panels, hung to the partitions, and the casings rabbited—see Fig. 3; the floors of $1\frac{1}{2}$ sound plank, the upper floor laid face side down and planed on the top, the beams planed on three sides; the sides of the room to be lined on the studding with $\frac{3}{4}$ tongued, grooved and planed boards; the spaces between the studs may be filled in with clay or loam, mixed with hay or straw, and some lime if convenient; a flue, 8 by 8 in., built with brick, on a good foundation, and topped out 2 feet above the peak; a step-ladder to the attic—Figs. 1, 2, 3, 4 and 5, to be made half the full size.

PLATE 38.—Designs XLI. and XLII. are perspective views of two cottages. The one on the left, on the top, is of the plainest character, without ornament or projections of any kind; that on the right has the roof projecting over the sides and gables, about ten inches; the two at the bottom of the plate are the same cottages in dimensions, but changed in external appearance by adding a porch over the front door, caps to the lower windows, dormer windows—roofs projecting over the sides and gables, 18 inches, with drapery in the gables of one, and brackets in the other; also, the foundation raised two feet above the surface.

These two cottages are to be built with good materials—the frames of spruce or pine—siding, $\frac{3}{4}$ boards, 8 inches wide; roofs of best pine shingles on rough boards; windows to have shutters in first story; doors with four panels and good rim locks; moulded casings to all the doors and windows; moulded base, 5 inches high; the closets with proper shelves; floors of $1\frac{1}{2}$ plank; partitions of 2 by 4 strips; strong step-ladder to cellar, and close stairs from first story to attic; cellar of good stone, laid in lime and sand mortar, 16 inches thick; chimney of brick, with a large fire-place in the front cellar and a 12 by 12 inch flue above, with three 6 inch iron stove pipe rings inserted; all the walls and ceilings in the house to be lathed and plastered one good heavy coat of best brown mortar, slipped and whitewashed; two brick hearths, one in parlor and one in cellar.

PLATE 39.—Ground plans and sections of Designs XLI., XLII. and XLIII.—the latter a double house, convenient for the accommodation of two families; an attic may be added with little expense by raising the posts 5 feet, which will give two rooms and closets each—see section; the dimensions of XLI. to be 16 by 22, and XLII. $18\frac{1}{2}$ by $21\frac{1}{2}$ —each one story, attic and cellar—see section.

PLATE 40.—Design XLIII. Two geometrical elevations, in the Italian style, for a double house, with the general appearance of a villa, to be built with wood as follows: frame of sound sawed timber, strongly framed: posts, sills, plates, trimmers, and framing beams, 4 by 8 and 4 by 9; beams, 2 by 9 and 2 by 10, 12 inches between centers; rafters, 3 by 6 and 3 by 4; studding, 2 by 4 and 3 by 4; the sides covered with clear boards, tongued and grooved, and the joints opened 1 inch; roof covered with best leaded tin on plank; veranda roof with narrow tongued and grooved clear plank; floors of $1\frac{1}{2}$ milled plank; doors paneled, and hung by broad butts, and secured by 4 inch mortice locks; window sashes, $1\frac{1}{2}$ inch thick, hung to the frames by parliament hinges, and secured by French latches and bolts; blinds to the outside; stairs to the cellar enclosed; from first to second story open, and 3 by 2 inch moulded rail, $1\frac{1}{2}$ in. turned balusters, 6 inch turned newel, all of St

Domingo wood; base, $1\frac{1}{4}$ thick, 6 inches high, moulded; closets all to be shelved; mantles of wood in second story, and veined marble in first; cellar walls of stone, 18 inches thick; two chimneys with 5 fire places each, the flues topped out 5 ft. above the roof; the cellar to be divided by an 8 in. hard brick wall; also 10 eight inch hard brick piers to support the girders; and seven piers for veranda columns; the center partition to be filled with soft brick laid on the flat, in mortar, to the rafters; the outside studding to be filled in with soft brick set on the edge, in mortar, to the plates; 4 neat grates set in the first story; all the rooms and halls, lathed and plastered two coats of brown mortar, and hard finished; 6 inch cornices in 4 rooms of first story. Painting: two coats of best paint, colored a light shade of straw color on the outside, and white inside; blinds, a dark drab; veranda floor and steps, light drab; tin roof, white.

PLATE 41.—Details of Design XLIII. Fig. 1, section of the main cornice and brackets. Fig. 2, section of the veranda cornice, brackets, open fascia and the cap, shaft and base of column. Fig. 3, section of the steps, newel balusters and rail for a plain staircase. Fig. 4, ground section of architrave and plinth for the first story, and Fig. 5, casing for the second story. Fig. 6, profile section of moulded base for the second story, and Fig. 7, for the first. Fig. 8, profile of the wall, floor timber, roof, cornice, height of stories, &c. Fig. 9, elevation of a window for the second story, representing the interior and exterior trimmings.

PLATE 42.—Details, Figs. 1, 2, 3, 4, and 5, for building with sun-dried brick; the outside walls 18 inches thick, 9 feet from the first floor to the plate—outside dimension; 18 feet 6 inches, by 24 feet. Fig. 1, represents the ground plan or section, divided by 7 inch brick partitions into 3 rooms, the floor timbers resting upon the projection of the foundations or cellar walls. Fig. 2, a profile section of the roof and second story beams connected with, and secured to, the walls. Fig. 3, section of the head, sill and side of window frames. Fig. 4, sections of the cap and sill for the outside door. Fig. 5, dimensions and proportion of brick for outside walls. Moulds for making the bricks should be of the following sizes: for walls 24 inches thick, 18 by 12 by 6; 20 inches, 15 by 10 by 5; for 18 inches, 18 by 9 by 6; 16 inches, 16 by 8 by 6; 15 inches, 15 by 12 by 6; 12 inches, 12 by 12 by 6; 8 inches, 12 by 8 by 6, or 16 by 8 by 6; and 7 inch walls, 12 by 7 by 6, the last named size is the best for partitions—the beams all to be 2 by 10, with one tier of bridging; door jambs, 8 inches wide, to receive the plastering; doors made plain, and either batten or panel; the base, steps, floors, &c. the same as in XLI; the roof to be steep; rafters, 3 by 6, secured by 2 by 8 collar beams, 8 feet from the second floor, the plates anchored; second story beams dovetailed in the wall plate; good split shingles, laid on rough boards; strips, 2 by 4 inches, built in the wall, to secure such trimmings for inside and out, as may be required—all the outside trimmings to have two coats of brown paint, and the inside two coats of white; the floors two coats of yellow ochre and oil. Figs. 6, 7, 8, and 9, represent a plan of building the outside of the house with common timber, joist and $\frac{3}{4}$ boards in panel work. Fig. 6, ground section of the joist, post, and panels for the sides of the house. Fig. 7, the floor, sill and beam connected with the foundation. Fig. 8, face section of the panel work in connection with the sill. Fig. 9, profile section of the roof, plate, tie beam, &c.—all the timber for this style of building, must be sound, seasoned and clear of shakes, worm holes, and defective knots; the grooves in the studs to be $\frac{1}{2}$ in. deep, and the panels put in with white lead; the sills, posts and studs to be planed; all the doors, windows, base, steps, closets, plastering, chimney, &c. to be same as for Design XLI.

ESTIMATE

Of the Labor and Materials required in the erection of Design XXXIX.

| | | | | | | |
|---|----|--------|--|--|-------|----------|
| 14 posts, 12 ft. long, 3 by 6; 2 beams, 12½ ft. long, 3 by 8; 4 bunches (or 2000) pine shingles, | - | \$2 50 | \$10 00 | | | |
| 2 sills, 18½ ft. " 3 by 6; 5 " 12½ ft. " 2 by 8; 48 lights, 10 by 12, glazed sashes, | - | 14 | 6 72 | | | |
| 2 " 12½ ft. " 3 by 6; 2 c. beams, 5 ft. " 3 by 6; 9 pairs 3 in. plain butts, 6c.; 6 short bolts, | - | 10 | 1 14 | | | |
| 2 c.sills, 12½ ft. " 2 by 6; 5 " 5 ft. " 2 by 6; 3 rim locks, 5 in., 81c.; 1 gross 1½ No. 10 screws, | - | 30 | 2 73 | | | |
| 2 plates, 18½ ft. " 4 by 6; 14 rafters, 9 ft. " 3 by 5; 30 lb. 4d.; 25 lb. 12d.; 40 lb. 10d.; 35 lb. 8d. nails, | - | 5 | 6 50 | | | |
| 5 beams, 12½ ft. " 2 by 9, | - | 12 | 1 72 | | | |
| Total—878 feet of timber, | - | \$1 35 | \$11 85 | | | |
| 20 joists for the end, studding, and braces, | 12 | 2 40 | 175 cubic feet of stone work in foundations, | 10 | 17 50 | |
| 74 tongued, grooved and beaded boards for lining and partitions, | - | 20 | 14 80 | 795 common brick, laid in chimney flue, | 10 | 7 95 |
| 120 boards for siding and trimmings, | - | 17 | 20 40 | 78 lbs. pure white lead, 7c.; 4 galls. oil, | 70 | 8 26 |
| 15 planks, 1½ in., for water table, corner boards, steps, &c., | - | 28 | 4 20 | 1 gall. spirits turpentine, 60; 4 lb. ochre, | 10 | 1 00 |
| 36 hemlock boards for the roof, | - | 11 | 3 06 | 5 days' painter's labor, | - | 1 75 |
| | | | | 20 days' carpenter's labor, | - | 1 50 |
| | | | | | | 30 00 |
| | | | | | | \$159 88 |

Estimate for Design XL on Plate 42.

| [WALLS OF SUN-DRIED BRICK.] | | | | | | | | |
|---|----|-------|-----------------------|---|--------------------------------|------|-------|----------|
| 64 yds. excavation, | - | - | 10 | 6 40 | 20 boards for frame and gable, | - | 40 | 8 00 |
| 904 ft. stone work in cellar and foundation | 9 | 81 36 | 672 ft. floor, | - | - | - | 4 | 26 88 |
| 1506 brick in chimney, | - | 9 00 | 13 55 | 190 ft. base, 3c.; shelves, hooks and pins, | 3 50 | 9 20 | | |
| 2565 brick, 18 by 9 by 6, laid in the wall, | 3½ | 89 78 | 4 doors, complete, | - | - | 5 00 | 20 00 | |
| 576 " 12 by 7 by 6, " partitions, | 3½ | 20 16 | 6 windows, complete, | - | - | 5 25 | 31 50 | |
| 120 yards cement plastering outside, | 12 | 14 40 | 2 " in cellar, | - | - | 2 00 | 4 00 | |
| 87 yds. of lath, brown, and slipped plastering, | 20 | 17 40 | 2 step ladders, each, | - | 2 50, | 3 50 | 6 00 | |
| 145 yards of wall plastering, | - | 8 | 11 60 | Painting woodwork, 2 coats, | - | - | 12 00 | |
| 1638 ft. of timber, | - | 1½ | 24 57 | | | | | |
| 15 joists for lintels and roof brackets, | - | 12 | 1 80 | | | | | \$474 20 |
| 915 ft. of shingle roof, on boards, | - | 8 | 75 60 | | | | | |

| [SIDES OF WOOD paneled.] | | | | | | | | | | | |
|--------------------------|---|---|---|------|-------|---|---|---|------|-------|----------|
| 65 yds. excavation, | - | - | - | 10 | 6 50 | 6 windows, | - | - | - | 5 00 | 30 00 |
| 747 ft. stone work, | - | - | - | 10 | 74 70 | 3 " | - | - | - | 2 50 | 7 50 |
| 2382 bricks in chimney, | - | - | - | 10 | 23 82 | 4 doors, | - | - | - | 5 00 | 20 00 |
| 274 yds. plastering | - | - | - | 20 | 54 80 | Mantle, shelving, hooks, &c., | - | - | - | - | 7 00 |
| 1500 ft. timber, | - | - | - | 1 60 | 24 00 | Steps to cellar, | - | - | - | - | 3 00 |
| 122 joist, | - | - | - | 13 | 15 88 | Stairs enclosed to cellar, with a door, | - | - | - | - | 12 00 |
| 96 planks, 1½ in. | - | - | - | 30 | 28 80 | Painting, inside and out, two coats, | - | - | - | - | 36 00 |
| 25 " | - | - | - | 22 | 5 50 | 20 days' carpenter's labor, making and putting up | - | - | - | - | |
| 828 ft. floor, | - | - | - | 4 | 33 12 | the frame and trimming, | - | - | 1 50 | 30 00 | |
| 236 ft. base, | - | - | - | 3 | 7 08 | | | | | | |
| 650 ft. roof, | - | - | - | 8 | 52 00 | | | | | | \$474 90 |
| 16 boards for fascias, | - | - | - | 20 | 3 20 | | | | | | |

Estimate for Design XLI.

| | | | | | | | | |
|-----------------------------------|---|---|-------|-------|-----------------------------|---|-------|----------|
| 52 yds. excavation, | - | - | 10 | 5 20 | Step ladder to cellar, | - | - | 3 00 |
| 700 ft. stone work, | - | - | 10 | 70 00 | 202 ft. base, | - | - | 3 06 |
| 223 yds. plastering, | - | - | 30 | 44 60 | Painting, two coats, | - | - | 30 00 |
| 1120 brick in chimneys, | - | - | 10 00 | 11 20 | | | | |
| 1180 ft. timber in frame, | - | - | 2 | 23 60 | | | | \$374 12 |
| 80 joists, | - | - | 18 | 10 80 | Add, | | | |
| 50 wall strips, | - | - | 15 | 7 50 | 4 dormer windows, complete, | - | 14 00 | 56 00 |
| 552 ft. of roof, | - | - | 8 | 44 16 | 4 window caps, | - | 2 00 | 8 00 |
| 1100 ft. siding, | - | - | 4 | 44 00 | Front porch, | - | - | 10 00 |
| 4 doors, | - | - | 5 00 | 20 00 | Brackets, | - | - | 5 00 |
| 6 windows, 5 25; 3 windows, 2 50, | - | - | - | 39 00 | | | | |
| 12 steps and risers, enclosed, | - | - | 1 25 | 15 00 | | | | \$453 12 |

Estimate for Design XLII.

| | | | | | |
|--|--------|--------|---|--------|----------|
| 84 cubic yds. excavation, - - - | 10 | \$8 40 | 14 steps and risers, first story, - - - | \$1 25 | \$17 50 |
| 863 cubic ft. stone work, - - - | 10 | 86 30 | Steps to cellar, - - - | - | 3 50 |
| 1830 hard brick, for chimney, - - - | \$1 00 | 18 30 | Shelving closets, - - - | - | 6 00 |
| 329 yds. plastering, - - - | 20 | 65 80 | Painting 2 coats, - - - | - | 47 50 |
| 2124 ft. timber in the frame, - - - | 2 | 42 48 | | | |
| 50 joist, - - - | 18 | 9 00 | | | 593 44 |
| 41 wall strips, - - - | 15 | 6 15 | | | |
| 1008 feet of shingle roof, - - - | 8 | 80 61 | Add, | | |
| 1398 feet siding, - - - | 3½ | 48 93 | 4 dormer windows complete, - - - | 14 00 | 56 00 |
| 128 feet eave and gable cornice, - - - | 25 | 32 00 | 4 window caps, - - - | 2 00 | 8 00 |
| 824 ft. floor, - - - | 3½ | 28 81 | Front porch, - - - | - | 10 00 |
| 290 ft. base, - - - | 4 | 11 60 | Brackets, - - - | - | 5 00 |
| 9 windows with frames complete, - - - | 4 50 | 40 50 | | | |
| 8 doors complete, - - - | 5 00 | 40 00 | Total, | | \$672 44 |

Estimate for Design XLIII.

| | | | | | |
|--|-------|--------|---|-------|-----------|
| 146 yards excavation, - - - | 10 | 14 60 | Amount brought up, - - - | - | 1041 44 |
| 1810 ft. of stone work, - - - | 10 | 181 00 | 28 doors complete, - - - | 7 50 | 210 00 |
| 7500 hard brick, in walls, tiers, &c. - - - | 10 00 | 75 00 | 19 window frames, sash and blinds complete, - - - | 10 50 | 199 50 |
| 17000 salmon and soft brick, laid, - - - | 8 00 | 136 00 | 6 cellar frames and sashes complete, - - - | 3 50 | 21 00 |
| 2 setts crane eyes, - - - | 50 | 1 00 | | | |
| 10 steps, 30 ft., - - - | 16 | 4 80 | | | \$1471 94 |
| 4 veined mantle pieces set complete, - - - | 22 00 | 88 00 | | | |
| 4 grates set, - - - | 8 50 | 34 00 | 550 lbs. pure white lead, - - - | 7 50 | 41 25 |
| 1087 yds. plastering, - - - | 24 | 256 08 | 22 galls. raw oil, - - - | 70 | 15 40 |
| 208 ft. cornice, - - - | 22 | 45 76 | 5 " boiled " - - - | 80 | 4 00 |
| | | | Litharge, glue, and colors, - - - | - | 5 00 |
| | | | 4 galls. spirits turpentine, - - - | 60 | 2 40 |
| | | | 23 days' painter's labor, - - - | 1 75 | 40 25 |
| | | | | | \$108 30 |
| 6955 ft. timber in the frame, - - - | 2 | 139 10 | By adding an attic, the breast 5 ft. and ceiling 6½ | | |
| 165 joist in frame and partition, - - - | 18 | 29 70 | feet high, divided into four bed rooms, two store | | |
| 175 wall strips in frame and partition - - - | 15 | 22 65 | rooms, and four closets, the cost will be as fol- | | |
| 2792 ft. siding, - - - | 4 | 111 68 | lows: | | |
| 1895 ft. tin roof on plank, - - - | 11 | 208 45 | 3430 soft brick, - - - | 8 00 | 27 44 |
| 104 ft. tin leader, - - - | 12 | 12 48 | 440 yds. plastering, - - - | 20 | 88 00 |
| 406 ft. veranda roof, - - - | 9 | 36 54 | 1004 ft. timber, - - - | 2 | 20 08 |
| 9 veranda columns, - - - | 6 50 | 58 50 | 50 wall strips, - - - | 15 | 7 50 |
| 38 ft. open fascia and cornice, - - - | 60 | 22 80 | 40 joists, - - - | 18 | 7 20 |
| 48 ft. plain cornice, - - - | 40 | 19 20 | 655 ft. siding, - - - | 4 | 26 20 |
| 197 ft. main cornice, - - - | 30 | 59 10 | 15 steps and risers, - - - | 1 50 | 22 50 |
| 36 brackets, 3½ by 2½ ft., - - - | 1 40 | 50 40 | 348 ft. base, - - - | 4 | 13 92 |
| 12 front and rear steps, - - - | 1 20 | 14 40 | 10 doors complete, - - - | 5 00 | 50 00 |
| 324 ft. veranda floor, - - - | 7 | 22 68 | 10 windows, - - - | 5 00 | 50 00 |
| 2384 ft. common floor, - - - | 4 | 95 36 | Shelving 4 closets, - - - | 2 00 | 8 00 |
| 888 ft. base, - - - | 5 | 44 40 | Painting, - - - | - | 18 00 |
| 24 steps and risers, principal stairs, - - - | 1 50 | 51 00 | | | \$338 84 |
| 2 step ladders to cellar, - - - | 3 50 | 7 00 | | | |
| 4 wood mantels and hearth borders, - - - | 4 50 | 18 00 | | | |
| 9 closets shelved, - - - | 2 50 | 18 00 | | | |

| | |
|--------------------------|----------|
| Design XXXIX. will cost, | \$159 88 |
| " XL. sun-dried brick, | 474 20 |
| " " wood, panel sides, | 474 90 |
| " XLI. plain, | 374 12 |
| " " ornamented, | 453 12 |
| " XLII. plain, | 503 44 |
| " " ornamented, | 672 44 |
| " XLIII. two stories, | 2416 48 |
| " " " with attic, | 2755 32 |

PERMANENT DWELLINGS.

THE author of the *Seven Lamps of Architecture* says, in the seventh chapter of that work, which he calls *The Lamp of Memory* : "The idea that a house must be large in order to be well built, is altogether of modern growth, and is parallel with the idea that no picture can be historical, except of a size admitting figures larger than life." To combat and overcome this "idea of modern growth," that houses must be large in order to be durable and comfortable, or even picturesque and elegant, is one of the aims which we have sought to accomplish in the ARCHITECT, both by the designs which we have furnished, and the text that has accompanied them. It is gratifying to have our own ideas confirmed by so high an authority in art as that of the author of the *Seven Lamps*, who is entitled to rank with the best writers on æsthetics, than any age or any country has yet produced. Ostentatious pride may sometimes display itself in useless amplitude in building, but the common sentiment of the human family coincides with the aspiration of Lady Mary Wortley Montague :—

"Grant me, O, God ! I cried, a little firm,
In summer shady, and in winter warm."

What more need the most aspiring mortal desire than this. Comfort is the first thing to be secured in a domestic dwelling, and after this, ornament becomes a necessity to a cultivated mind. The author of the *Seven Lamps* goes a step beyond this, and insists that a dwelling must not only be comfortable and fit, but that it must be indestructible.

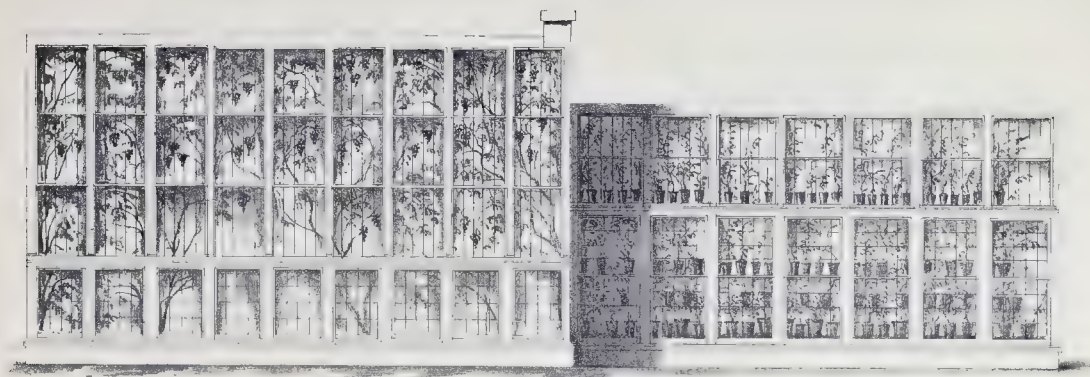
"It is in becoming memorial or monumental," says the most accomplished author, to whose work we have alluded, "that a true perfection is attained by civil and domestic buildings ; and this partly as they are, with such a view, built in a more stable manner, and partly as their decorations are consequently animated by a metaphorical or historical meaning. As regards domestic buildings, there must always be a certain limitation to views of the kind in the power, as well as in the hearts of men ; still I cannot but think it an evil sign of a people when their houses are built to last but one generation only."

One generation only ! A dwelling-house with us which outlasts a generation, is regarded as a hoary and venerable relict of past times. As in these days of scientific discovery and active invention, the habits of society change as rapidly almost as Time wings his flight, it is impossible that houses should be built so as to anticipate the wants of the next generation. An old house, with its crumbling memorials of a past age and its sanctifying memories of reverential occupants, is truly a fine object to contemplate ; but its unwholesome damp and worm-eaten timbers are not calculated to add to the comforts of a new generation, whose wants and pleasures were not consulted when it was built.

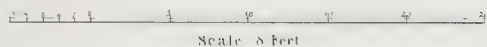
in colors is, if possible, more valuable to the house-painter than to the artist who is engaged in painting from nature; for he has no means of relieving the strong contrast between two colors by the introduction of lights and shades. It is very difficult, as artists are well aware, to introduce a light blue in a composition, so that it may be harmonious. Orange is its contrasting color; but both are brilliant and calculated to attract the eye. To meet this difficulty attention must be paid to the tone. Suppose that blue is to be the predominating color, the orange may be of the gravest tone; but it is by the introduction of light and shade that all the discordances of coloring are avoided. The house painter, on the other hand, has not generally an opportunity of obtaining effect in this manner, and, consequently, the selection of colors and lines is to him all-important."

If it is all-important to a house-painter to be well-instructed in his art, it is of greater importance still that he should be to his employer. But, as our space will not admit of a treatise on the philosophy of color, and the art of mixing pigments, we can do little more than to give a few hints for the guidance of those who lack taste rather than knowledge in such matters.

The exhibition of artistic knowledge is very rare in the decoration of even the most costly houses in the country, but there is often an ambitious display of ornamentation in the so-called style of Louis Quatorze that is more offensive than the chilly white walls so common both in town and country dwellings. It is very obvious that the same style of coloring cannot be properly used for rooms appropriated to different uses, yet but little discrimination is usually shown in this important particular. A parlor which is used for the reception of company and on festive occasions, should be gay, brilliant, and free from all vulgar or homely objects, the dominant tone of color should be bright and warm. The family sitting-room, on the contrary, should be warm, rich, and mellow, quiet and soothing. The hall or vestibule should be of a sober and a cooler tint; while the bed-rooms should be light and cheerful, without being bright or garish. It has lately become the fashion to bestow a profusion of grotesque ornaments on dining-rooms, where such a style of decoration is extremely misplaced. People enter a dining-room for the sole purpose of enjoying the pleasures of the table, and it is therefore pure surplussage and waste of material and labor to expend them in the production of objects which, if regarded at all, only serve to distract attention from the only object on which it should center. The dining-room of a private dwelling-house should, therefore, be the least ornamented or showy apartment in it. If people would but give themselves the trouble to expend a little thinking upon the painting and decoration of their houses, we should not so frequently see rooms furnished so incongruously in regard to the uses for which they are designed. There are some very tidy housekeepers who prefer pure white paint, and walls as white and as chilly in aspect as snow, for the reason that they show the least speck of dirt; while there are some who prefer a very dark brown or dismal blue for the opposite reason, that dark colors do not show the dirt. But the better way is to suit the eye and the sense of fitness in the service for which it is designed, and to keep clean for the sake of cleanliness without any regard to looks.



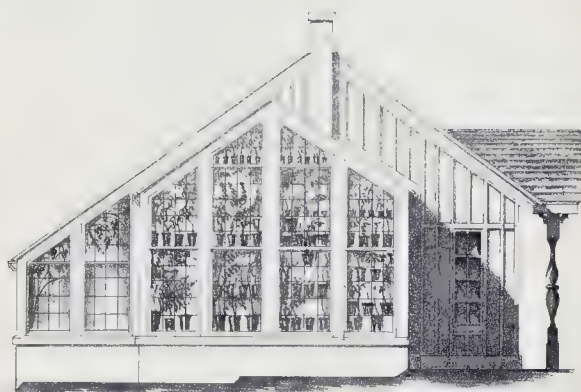
SOUTH ELEVATION



Scale 8 Feet



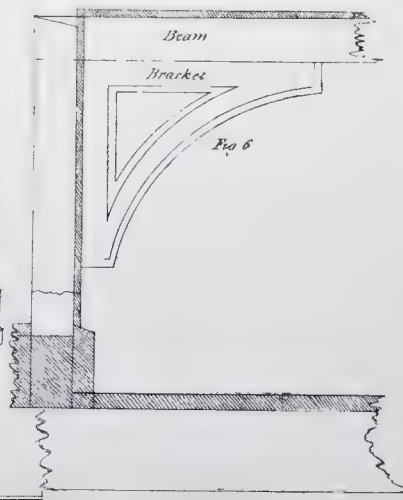
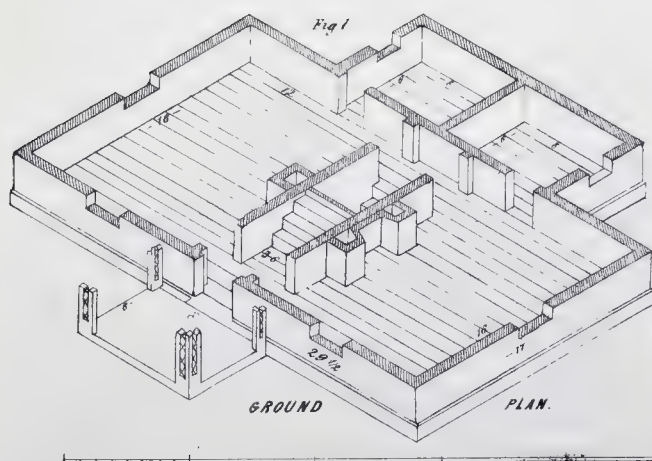
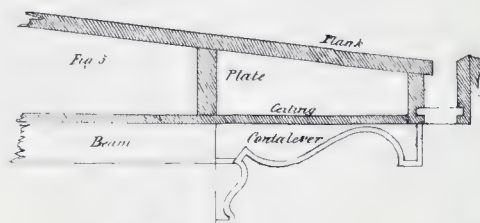
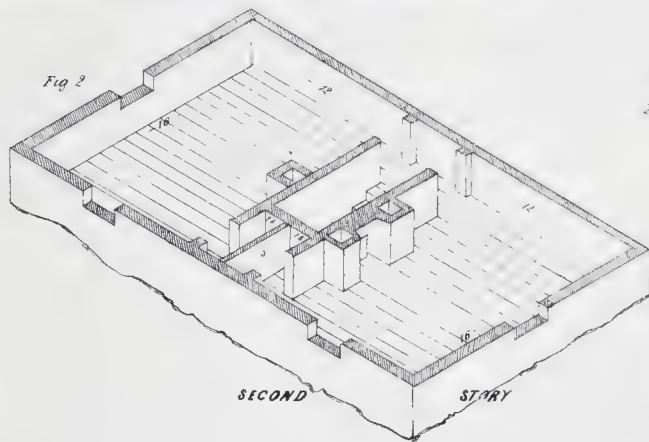
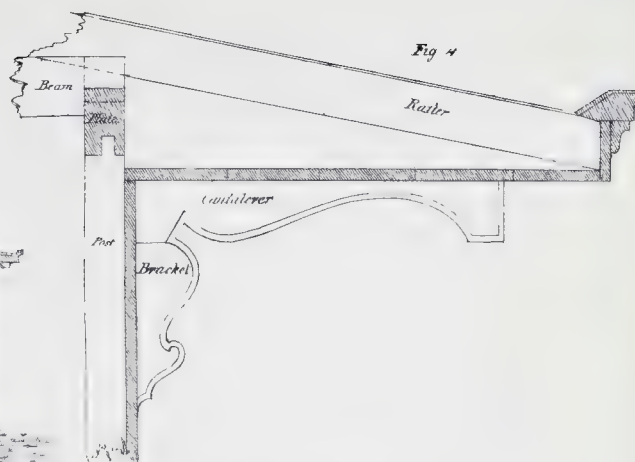
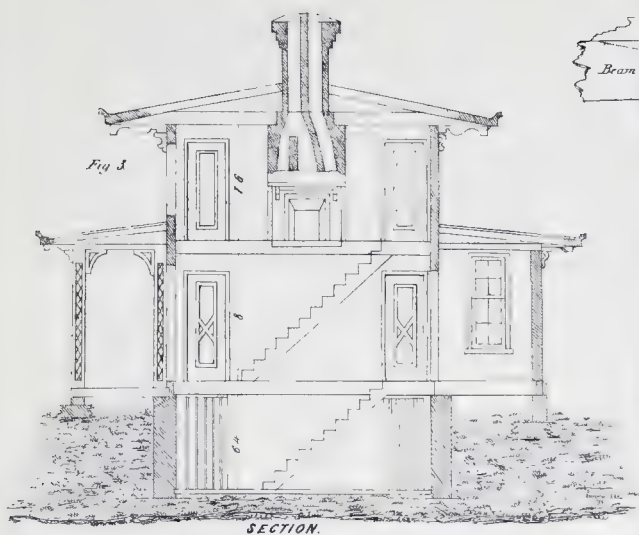
WEST ELEVATION



EAST ELEVATION.



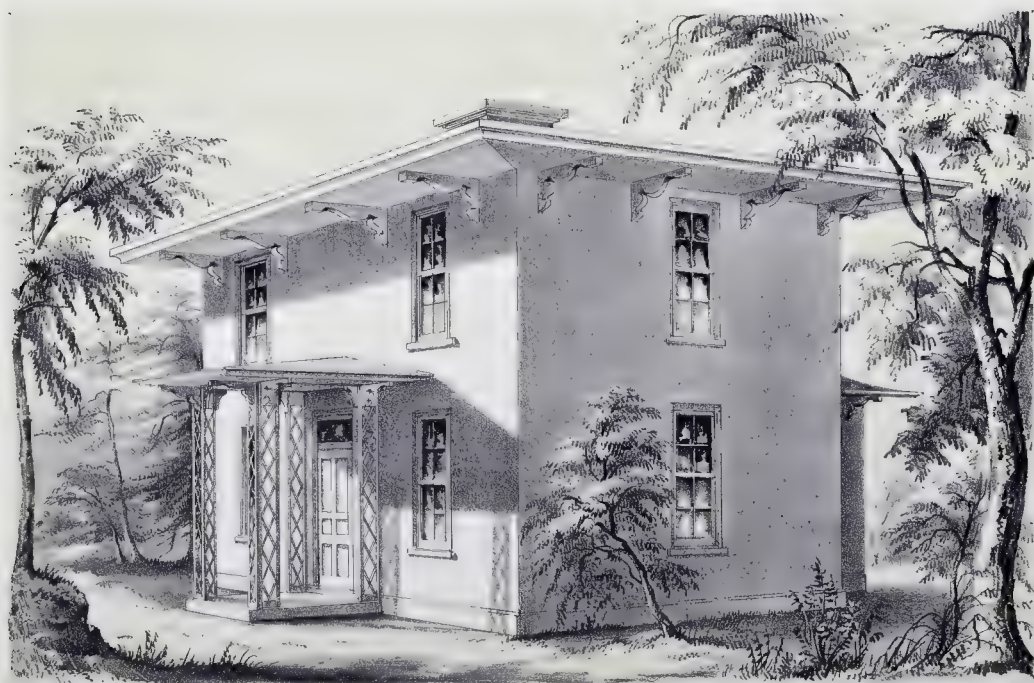
GROUND PLAN



See the list of feet & inches for figs 4, 5 & 6



ENGLISH COTTAGE



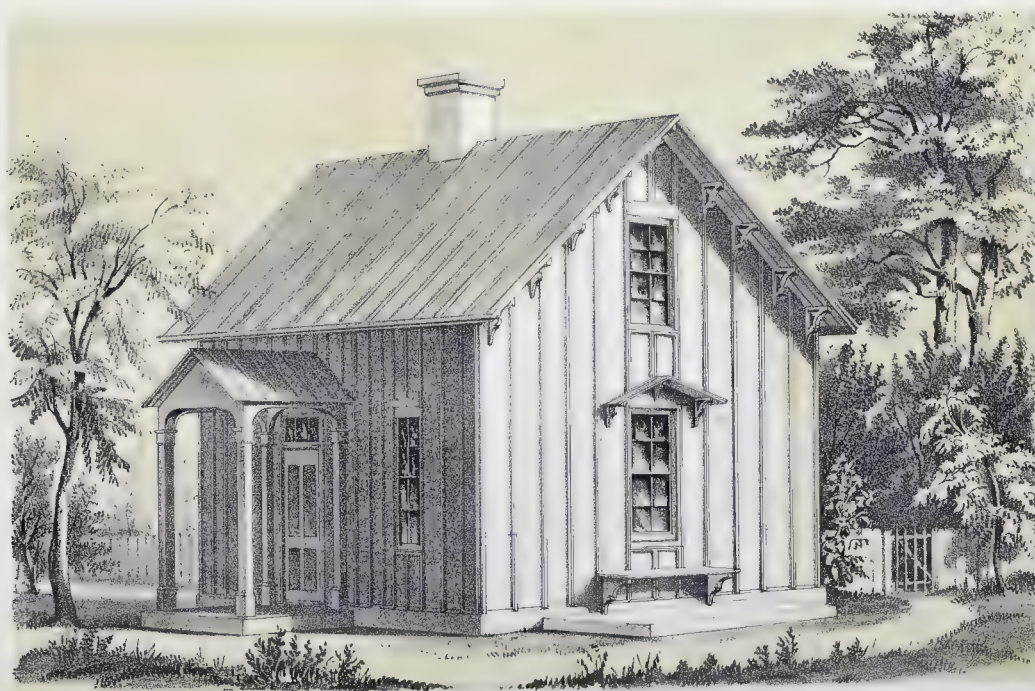
Designed & Del. by W. H. R. R. R.

COTTAGE VILLA.

MOVED & BUILT BY W. H. R. R. R.



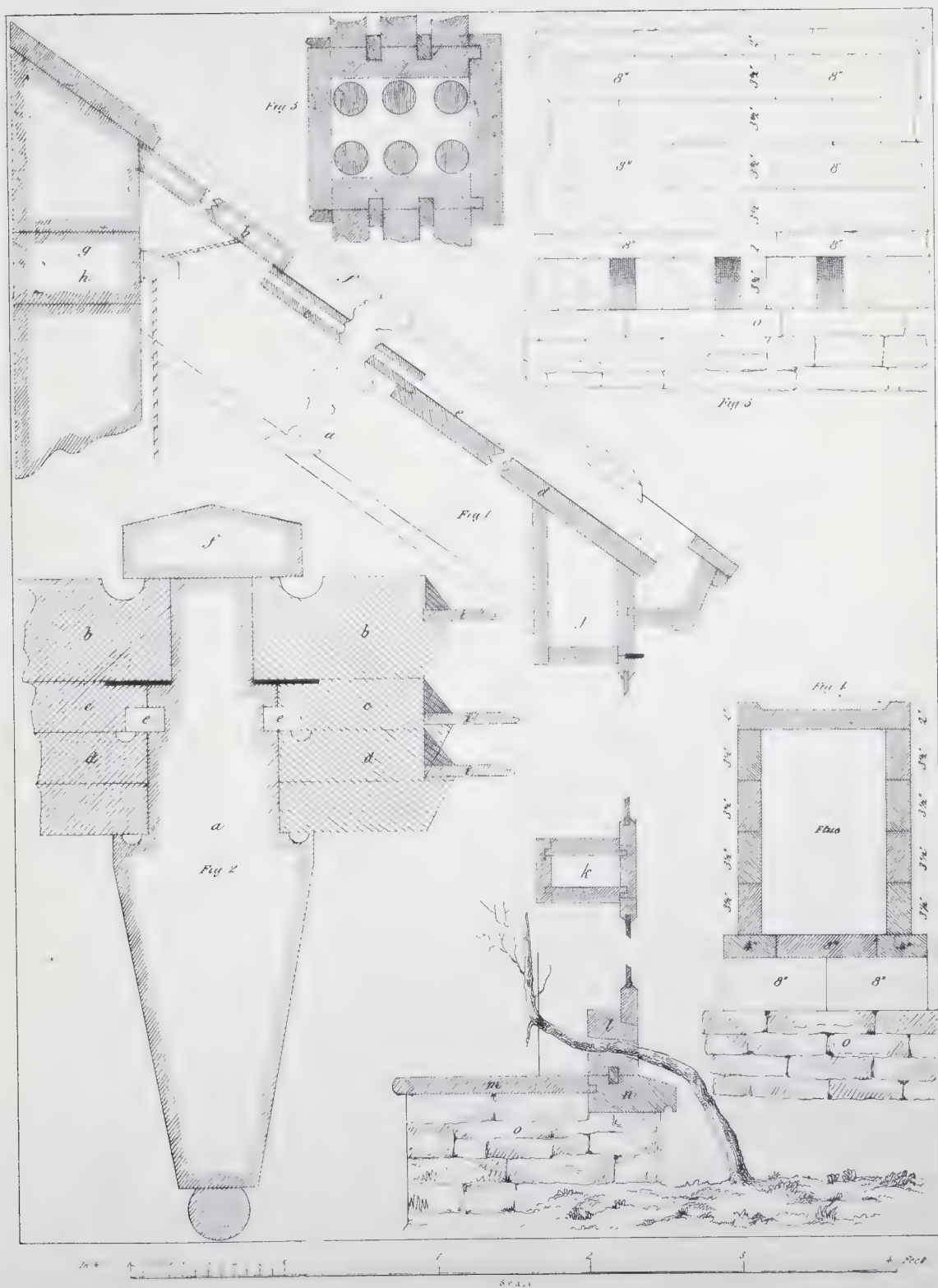
COTTAGE VILLA



ENGLISH COTTAGE



Fig. 2 - full size
Fig. 1 3 4 5 6 7 - full size



DESCRIPTION OF THE PLATES.

PLATE 43.—Designs for a Vinery and Green-House connected (now being erected near Morristown, N. J.) The vinery to be heated by a hot air flue, and the green-house by hot water in pipes, both from one fire. The vinery is 18 ft. by 34 ft.; green-house, 16 ft. by 30 ft., and potting room, 11 ft. by 32 ft.; front of grapery 5 ft. high, and of green-house 8 ft.; elevation of roof 38 degrees, or $9\frac{1}{2}$ in. to the foot; the sashes 2 in. thick and lapped in three lengths to the vinery, and two lengths to the green-house—the upper sashes to slide on cast rollers, and secured with strong cords through 3 in. pullies; all the glass in the roof sashes to be double thickness English crown, glazed with pure white lead and oil putty, the joints to lap one eighth of an inch; the upright sashes glazed with double thickness Winslow glass; the end sashes and front sashes of the green house to be double hung by weights and cord; the front sashes of vinery with butts on the top, and the division sashes to fold and hang by butts. The roof of potting room and portico to be covered with shingles on tight boarding; the sides with tongued and grooved boards, planed and nailed on upright, with 1 inch by 3 inch battens over the joints; two entrance doors, to the potting room and three 8 light windows, 10 by 14. The foundation walls of stone, 20 inches thick, sunk 3 ft. 6 in. below the surface, and laid up with lime mortar; the back wall of vinery may be of stone, 18 in. thick, or of brick, 12 inches thick; the back wall of green-house of brick, 12 in. thick. The floor of potting room paved with hard brick, and the walls of green-house flagged with blue stone, 3 ft. wide. Soil 2 to 3 feet deep in the spaces enclosed by the walks of green-house and flue of the vinery; fire-place made with common hard brick to receive the grate bars, and fire chamber with fire bricks, covered with heavy tiles; the hot air flue (See Plate XLVIII, Figs. 4 and 5) 10 by 14 inches in the clear, the bottom and sides of good smooth hard brick, laid in best lime and mortar—the bottom to rest on bricks set 2 in. apart, and raised from the stone foundation $3\frac{1}{2}$ inches—the flue to be covered with plain and pan tiles, alternately from the fire chamber to the smoke flue in the rear wall—this flue to continue in the wall diagonally, and discharge directly over the fire; a vertical smoke flue from the fire chamber to be carried out with the other, two ft. above the roof; a damper in each flue about 3 ft. from the fire chamber—that in the vertical flue to shut off the smoke draft, giving free heat to the vinery, and the one in the hot air flue to shut off the heat from the vinery. The green-house to have a cast iron boiler or water back, with 3 in. iron pipes to continue on the outside of the walk and return to the boiler—the pipe to be raised 4 to 6 in. from the surface. A round reservoir in the potting room, made of wood and bound with iron, raised 2 ft. from the floor, to hold 500 galls of water, and supplied by a hydraulic and force pump, from a spring or well, or a rain water cistern; a strong pipe leading from the reservoir to the water back.

PLATE 44.—Ground plan section and detail drawings for Design XLVI, Figs. 1 and 2; the floor plan of first and second stories in isometrical perspective, representing the several divisions and dimensions. Fig. 3, section through the cellar hall, first story hall, and bed-room, and principal bed-room in second story. Fig. 4, profile section of main cornice, and Fig. 6, connection of veranda to the house.

PLATE 45.—Perspective views of a cottage in the Anglo-Swiss style, Design XLV., and a cottage villa in the Italian style, Design XLIV. The cottage may be built with brick walls, 8 in. thick, furred on the inside for lathing and plastering, and the outside painted two coats of drab paint—the wood-work painted the same shade of color. When brick are procured with difficulty the frame and covering may be made of wood—the frame of hemlock or spruce timber; sills, posts, and plates, 4 by 6; beams, 2 by 8; rafters, 2 by 6; sides covered with 6 in. tongued and grooved boards, nailed on horizontally—the joints filled with white lead; cornice boards and window-frame casings to nail on the outside; floors of milled plank; roof covered with cypress shingles, the corners cut; doors, $1\frac{1}{2}$ thick, 2 panels; sashes, $1\frac{1}{2}$ thick, hung by butts

and secured by latches, painted on the outside and inside a peach-blossom color. The cottage villa to be built with wood: the frame of good sound, square timber; posts, plates, sills and framing-beams, 3 by 8; first and second tier of beams, 2 by 8, 16 in. between centers; roof tier, 2 by 7, 2 ft. apart, and the beams 3 by 8; sides covered with $1\frac{1}{2}$ tongued and grooved plank and overlaid with clear $\frac{3}{4}$ boards, 6 in. wide, the joints tongued and grooved, and opened $\frac{1}{4}$ by $\frac{1}{2}$ an inch; the roof plancere of narrow tongued and grooved clear boards; cantalevers of clear seasoned pine; roof covered with best leaded tin (14 by 20) on milled plank; window-sashes, $1\frac{1}{2}$ thick, double hung by weights and cord; doors 6, $1\frac{1}{2}$ panels; stairs enclosed both sides; floors of pine milled plank; partitions set with 2 by 4 wall strips; cellar wall of stone, 16 in. thick, 7 ft. high; brick chimney with two fire-places, and two marble shelves on iron bronze brackets; two stories plastered two coats each of brown mortar and hard finished.

PLATE 46.—Perspective views of a cottage villa in the Italian style, Design XLVI., and a cottage in the English rural style Design XLVII. The latter cottage designed to be enclosed with rough tongued and grooved boards, 8 in. wide, with $\frac{3}{4}$ by $\frac{1}{4}$ grooves on the outside, one inch from the joint, and covered with 1 by 3 in. battens, beveled both edges, and thoroughly nailed on the joints, well painted with white lead and oil before nailing; the roof made in the same manner; boards clear and sound and planed; the roof brackets $2\frac{1}{2}$ in. thick; all the windows 8 lights, 10 by 14 and 10 by 12; the sashes, $1\frac{1}{2}$ thick, double hung by cord and weights; doors and panels; 5 in. rim locks, mineral knobs; floors of spruce milled plank; partitions, 2 by 4 strips, 16 in. between centers; outside painted 2 coats of Ohio drab mineral paint and linseed oil, mixed with an equal quantity of white lead, ground in oil; the cellar wall 6 ft. 6 in. high, 16 inches thick, laid in best lime and sand mortar; all the walls and ceilings lathed and plastered two coats of brown mortar, slipped and whitewashed; a chimney, with two fire-places and two grates.

PLATE 47.—Ground plans, section and details of Design XLV. Fig. 1, section of the gable, moulded barge boards and hip-knobs. Fig. 2, profile section of the same. Fig. 3, section showing shingling, finish of rafter and eaves brackets. Fig. 4, face view of the same, with section of rafters. Fig. 5, face and profile of gable brackets; and Fig. 6, elevation of a section of front porch with bracket, plan of the column, &c.

PLATE 48.—Detail drawings for the vinery. Fig. 1, section of the sash roofing: *a, a*, rafter; *b, b*, upper sliding sash; *c, c*, middle sash; *d, d*, lower sash; *e, e*, check strip; *f, f*, rafter cap; *g*, rafter dovetail, secured to the main plate; *h*, main plate; *j*, lower plate and gutter; *k*, sash upright and rafter supporter; *l*, slip sill, cut to receive the vine; *m*, shelf sill; *n*, main sill; *o, o*, stone walls. Fig. 2, section of principal rafter and sash stiles, half full size. Fig. 3, section of a double window jamb, the plan of making, &c. Fig. 4, cross section of the hot air flue, and Fig. 5, face section of the same.

TABLE

SHOWING THE CAPACITY OF CISTERNS, WELLS, &c., IN GALLONS, IN PROPORTION TO THEIR DIAMETER AND DEPTHS

| CAPACITY IN GALLONS | | | | | | |
|---------------------|-------------|-------------|-------------|-------------|--------------|--------------|
| Diam. in feet. | Depth 1 ft. | Depth 2 ft. | Depth 3 ft. | Depth 5 ft. | Depth 10 ft. | Depth 12 ft. |
| 3 | 44.1 | 88 | 132 | 220 | 441 | 529 |
| 3½ | 60.2 | 120 | 180 | 301 | 602 | 722 |
| 4 | 78.6 | 157 | 235 | 393 | 786 | 943 |
| 4½ | 99.5 | 199 | 298 | 497 | 995 | 1194 |
| 5 | 122.8 | 245 | 368 | 614 | 1228 | 1473 |
| 5½ | 148.5 | 297 | 445 | 742 | 1485 | 1782 |
| 6 | 176.8 | 353 | 530 | 884 | 1768 | 2121 |
| 6½ | 207.4 | 414 | 622 | 1037 | 2074 | 2488 |
| 7 | 240.6 | 481 | 721 | 1203 | 2406 | 2887 |
| 7½ | 276.2 | 552 | 828 | 1381 | 2762 | 3314 |
| 8 | 314.2 | 628 | 942 | 1571 | 3142 | 3770 |
| 8½ | 354.7 | 709 | 1064 | 1773 | 3547 | 4256 |
| 9 | 397.7 | 795 | 1193 | 1988 | 3977 | 4772 |
| 9½ | 443.1 | 886 | 1329 | 2215 | 4431 | 5317 |
| 10 | 490.9 | 981 | 1472 | 2454 | 4909 | 5890 |
| 11 | 594. | 1188 | 1782 | 2970 | 5940 | 7128 |
| 12 | 706.9 | 1413 | 2120 | 3534 | 7069 | 8482 |

"Solids are measured by cubic yards, feet and inches; 1728 cubic inches making a cubic foot, and 27 cubic feet a cubic yard. For all sorts of liquor and dry measure, the standard has been declared by an act of the British Parliament, in the year 1824, to be the imperial gallon, the capacity of which is determined by weight in the following manner:—According to the act, the imperial standard gallon contains 10 pounds avoirdupois weight of distilled (or rain) water, weighed in air, at the temperature of 62° Fahrenheit's thermometer, the barometer being at 30 inches; the pound avoirdupois contains 7,000 troy grains; and it is declared that a cubic inch of distilled water (temperature 62° barometer 30 inches) weighs 252.458 grains. Hence the contents of the imperial standard gallon are 277.274 cubic inches.

"The dimensions of liquid and dry measures are in pints, quarts, gallons, pecks, bushels and quarters; or, 2 pints a quart, 4 quarts a gallon, 2 gallons a peck, 4 pecks a bushel, 8 bushels a quarter.

"Divisions of superficial measure are in inches, feet, yards, rods, acres and miles—or, 144 inches a foot, 9 feet a yard, 272½ feet a rod, 160 rods an acre, 640 acres a mile.

"Divisions of lineal measure are inches, feet, yards, fathoms, rods, furlongs, miles, leagues, and degrees—or, 12 inches a foot, 3 feet a yard, 6 feet a fathom, 5½ yards or 16½ feet a rod, 40 rods a furlong, 8 furlongs a mile, 3 miles a league, 60 miles a degree."

TO FIND THE AREA OF A CIRCLE.

Multiply the square of the diameter by .7854, or the circumference by .07959, or the circumference by the diameter, and divide the product by 4; or multiply ¼ the diameter by ¼ the circumference, either of which will give the true number of superficial feet, or inches, and parts.

EXAMPLE.

Dia. .3 ft. multiplied by 3.1416 equals 9.4248 ft. which is the circumference. Half the diameter multiplied by half the circumference, furnishes the area of the base which is 7.0686 superficial feet, or cubical feet, when the depth is one foot; and this product multiplied by 64 gives the whole number of gallons the cistern or vessel contains; and in the same manner, by using the above given decimals, the capacity of any circular vessel, cistern or well, may be obtained.

ESTIMATE

Of the Materials and Labor required in the Erection of Design XLIV.

| | | | | | |
|-----------------------------------|-------|---------|---|--------|----------|
| 128 cubic yds. excavation, - - | \$ 10 | \$12 80 | 2 closets, shelved, - - | \$2 75 | 5 50 |
| 837 cubic ft. stone work, - - | 10 | 83 70 | 2 wood mantles, - - | 3 | 6 00 |
| 5000 bricks for chimneys, &c. - | 8 00 | 40 00 | 224 ft. base, - - | 5 | 11 20 |
| 388 sq. yds. plastering, - - | 20 | 77 40 | 40 ft. 3 in. leader, - - | 13 | 5 20 |
| 5112 salmon bricks for filling, - | 6 00 | 30 67 | 125 ft. cornice, 75c. : 16 brackets, 60c. ea. | | 103 35 |
| 2 window sills, - - | 40 | 80 36 | " " 65c. ; 8 " 50c. ea. | | 27 40 |
| 2598 ft. timber, framed, - - | 2 00 | 51 36 | 28 " " 70c. ; 12 " 40c. ea. | | 24 40 |
| 153 joist, - - | 18 | 27 54 | 11 doors, complete, - - | 7 50 | 82 50 |
| 111 milled floor plank, - - | 27 | 29 97 | 24 steps and risers, - - | 1 25 | 30 00 |
| 12 narrow " - - | 18 | 2 16 | 2 double antæ, \$5 00 ; and 2 single, | 2 00 | 11 00 |
| 10 window frames, complete, - | 4 00 | 40 00 | | | |
| 35 lights, 12 by 14 glass - - | 16 | 5 60 | | | \$719 35 |
| 48 " 10 by 13 " - - | 15 | 7 20 | | | |

Estimate for Design XLV.

| | | | | | |
|---|-------|-------|------------------------------------|-------|----------|
| 9½ cubic yds. excavation, - - | \$ 8 | \$ 76 | 122 ft. base, - - | 5 | 6 10 |
| 192 cubic ft. stone work, - - | 10 | 19 20 | 12 steps and risers, - - | 1 25 | 15 00 |
| 291 bricks for chimney, and laid, - | 8 00 | 16 72 | 48 ft. barge board, - - | 30 | 14 40 |
| 3761 salmon bricks for filling, " - | 6 00 | 22 58 | 1 porch, complete, - - | | 25 00 |
| 135 sq. yds. plastering, - - | 20 | 27 00 | 1 grape arbor, - - | | 10 00 |
| 1837 ft. timber, framed, - - | 2 00 | 36 74 | 14 brackets for raking cornice, - | 70 | 9 80 |
| 75 joist, - - | 18 | 13 50 | 14 " level, " - - | 20 | 3 60 |
| 50 milled floor plank, - - | 27 | 18 50 | 5 doors, complete, - - | 7 50 | 37 50 |
| 11 narrow " - - | 18 | 1 98 | 1728 cypress shingles, - - | 15 00 | 25 92 |
| 5 window frames, complete and glazed, - | 5 75 | 28 75 | 60 hemlock boards for shingling, - | 12 | 7 20 |
| 2 " " " - - | 8 00 | 16 00 | Painting, - - | | 60 00 |
| 3 dormer " " - - | 14 00 | 42 00 | | | |
| 1 closet, shelved, - - | | 2 75 | | | \$461 06 |

TABLE.

| COST OF MATERIALS AND LABOR FOR 100 YARDS OF LATH, PLASTER, AND HARD FINISH, OR, THREE-COAT WORK. | | | COST OF MATERIALS AND LABOR FOR 100 YARDS OF LATH, PLASTER AND SLIPPED, OR TWO-COAT WORK. | | |
|---|--------|---------|---|--------|---------|
| 4 casks of Thomaston lime, - | \$1 00 | \$4 00 | 3 casks lime, - | \$1 00 | \$3 00 |
| 2-3 " lump " - - | 1 50 | 1 00 | 6 loads sand, - | 30 | 1 80 |
| 1½ " plaster, - - | 2 00 | 1 00 | 3 bushels hair - | 20 | 60 |
| 4 bushels hair, - - | 20 | 80 | 2000 lath, - - | 2 00 | 4 00 |
| 2000 lath, - - | 2 00 | 1 00 | 13 lbs. nails, - | 7 | 0 91 |
| 7 loads common sand, - - | 30 | 2 10 | 3½ days' mason's labor, - | 1 50 | 3 25 |
| 2½ bushels white " - - | 10 | 25 | 2 " laborer, - - | 1 00 | 2 00 |
| 13 lbs. nails (3d), - - | 7 | 91 | Cartage, - - | | 1 19 |
| 4 days' mason's labor, - - | 1 50 | 6 00 | | | \$18 75 |
| 3 " laborer, - - | 1 00 | 3 00 | | | |
| Cartage, - - | | 1 94 | | | |
| | | \$25 00 | | | |
| | | | Or, 18½ cts. per square yard. | | |
| Or, 25 cts. per square yard. | | | | | |

| | |
|---------------------------|----------|
| Design XLIV. will cost, - | \$719 35 |
| " XLV. " - - | 461 06 |
| " XLVI. " - - | 740 00 |
| " XLVII. " - - | 495 00 |

N. B.—The cost of the Vinery and Green-house will be given in detail on page 75 of this work.



PERSIAN VILLA.

The above wood-cut represents a design which was furnished in the third number of this Volume. There have been three houses built after the plan, and the design has been found to unite the light and graceful elements of Persian buildings with the more solid and substantial features of the English cottage villa. In a favorable situation, the design has an extremely pleasant and novel effect; it may be constructed of wood or brick, to suit the fancy or convenience of the builder, and it would be found equally well adapted for light brown free stone.

No attempt can of course be made in a small villa to give anything like an idea of Persian architecture, the ancient and modern styles of which unite the grandest and most fanciful forms. The ancient architecture of Persia, of which there are sufficient remnants to give a perfect idea of its character, was like those of ancient Egypt, from which it was, doubtless, imitated. The City of Persepolis, the ancient capitol of Persia, was destroyed two-thousand years ago; but time and the ravages of marauding barbarians have left enough of the stupendous structure, called chil-minar, supposed to be the palace destroyed by Alexander in a drunken debauch, to enable us to form a correct idea of what this magnificent palace must have been in its perfect condition. The ruins have been minutely described by Sir Robert Kerr Porter. The modern architecture of Persia, from which we have borrowed the forms introduced in the above design, does not differ materially from that of the other Mahometan countries of the East. The city of Ispahan, in its prosperous days, was one of the most magnificent of the old world, and although its architectural grandeur was of a showy and unsubstantial character, enough of its former greatness still remains from which many valuable hints may be borrowed by the architects of the Western world. Nearly all of the houses of this showy city are constructed of sun-dried bricks, of which we have given some account in another part of this work; the public edifices were constructed of kiln-burnt brick, often fancifully colored and glazed, or covered with inscriptions from the Koran. The houses of the Persian cities which are occupied by the officers of the Sha and by opulent merchants have many peculiarities that might be advantageously copied in our dwellings. Ispahan was as famous for its immense Caravanseres as New-York is for its great hotels. It is said that there are in Ispahan no less than 1802 of these Eastern hotels or Caravanseres, many of which were on a much more magnificent scale than our Astor House, although a different kind of entertainment was offered in them to visitors. Domes, minarets, and verandas are the external signs of the Persian style of architecture, while the interior of these luxurious dwellings abounded in immense mirrors, gilded ornaments, arched apartments, lattice work, fountains, and marble pavements. The growing opulence and natural taste of our "upper classes" is fast verging towards a style of domestic dwellings which have more solidity and comfort, and much of the luxurious profusion which characterize those of Persia.

AMERICAN HOUSES.

ALTHOUGH we cannot, in the United States, lay claim to any national style of Architecture, yet in adapting to our own necessities the architectural forms which were originated by other nations, we must, of necessity, so vary them as to give them, to a certain extent, an American expression. As our people become older they grow more independent of the countries whence they emigrated, and gradually make their habitations to conform to the peculiarities of soil and climate where they reside. Thus in another century, the architecture of different States will be greatly varied, although there is but little difference discernable now in the houses of the Northern and the Southern States. Fifty years ago there was no difference between the house of the Carolina planter, and the New-England farmer, because both came from the same country and reproduced here the houses which they had been accustomed to dwell in in their father-land. New-York long retained distinctive traces of the Dutch origin of its first settlers, while in Louisiana may still be seen the gloomy quadrangular houses, looking like small fortresses, which were first erected by the Spaniards, with their grated windows, court-yards, and covered galleries. The French left numerous traces of their national taste in the houses which they erected when they took possession of the State, and these contrast oddly with the plain and economical buildings erected by the emigrants from the Eastern States, after the transfer of the territory to our own government. Neither the Spaniards, nor French, nor Yankees, erected buildings suitable to the soil and climate, but only such as they had been accustomed to in their original homes, and the same was done in other parts of the Union, but in none other are the different national peculiarities so strong as in New Orleans, because, in none other was there the same succession of different races. The present inhabitants of the soil will, out of the various styles introduced by their ancestors, form one which will have characteristics of its own, adapted to their habits and necessities. The same change is constantly going on in the older parts of the country, and New-England, like New-York and Pennsylvania, is continually growing more original and less like Old England. Plate No. 50, second Volume, and Design XLVIII., presents the side and front elevations of a Villa in what we must call the American Style. It is unlike any other, but yet is made up, as it necessarily must be, of many distinct parts, borrowed from different nations. The whole forms an American house, or villa, adapted to the soil and climate of the New-England and Middle States, and capable of being so modified, that it will be found equally well adapted to Louisiana or Texas. It has, as will be seen, Swiss brackets, English gables, French windows, Italian Verandas and Balconies.

These different elements harmonize admirably together, and form a perfectly congruous and convenient whole, which may be constructed of either wood or stone.

On plate No. 53 are presented two designs, in which there is less variation from the original styles which have been adopted, but which are still sufficiently Americanized to render them well adapted

to any part of our Union. The first of these designs, No. XLIX., is a Villa in the Tudor style, with a veranda and balconies ; it displays the picturesque and solid features of the old English country house, while the heavy drip stones of the windows are converted into an ornamental dressing. Design No. L., on the same plate, is a Villa in the Greco-Italian style, with a bold projecting roof, highly ornamented brackets, and balconies. This style is better adapted to a sunny climate than to the snowy region of New-England. It offers a very striking contrast to the Tudor, or old English, and is admirably adapted to the highly cultivated neighborhood of our cities and large towns.

It has often been made a reproach to our national character that we imitate all other people in our architecture, while we have nothing that we can claim as our own. But so far from this being a reproach, it is rather a credit, that having a knowledge of the old world's experience we have the intelligence to avail ourselves of the wisdom of our ancestors. It would be as unwise to reject the inventions and discoveries in art of those who have gone before us, as to reject all the articles of foreign growth which add to the luxuries of the table or the comforts of daily life. There is an affiliation in art, as there is in language, and the common origin of the human family from the same source may be traced more clearly in the architectural remnants of extinct nations, than in the languages of the various people of which we have any knowledge. There are many nations of whose existence we only know by their ruined monuments, whose language has utterly perished, and by these fragments of their manners we know that they were akin to ourselves. Our architecture, like our language, is made up of borrowings from the rest of the world, with a portion of our own inventions ; and notwithstanding that it is so diverse in its character it will be found that we have invented more than we have imitated. If any of the great architects of antiquity were to visit our houses, they would confess that we had so materially improved upon the models which their genius has furnished us, that our domestic dwellings and public buildings are as worthy of the name of original edifices as any that antiquity can boast of.

In all the interior arrangements of our houses, if not in the mere grandeur of external show, there cannot, of course, be any comparison of ancient with modern domestic buildings ; and it is for their habitableness—their comfort-affording capacities alone, that houses are valuable ; lacking these qualities they lack everything. We can well afford to allow the pre-eminence of outside grandeur to the ancients, while we can claim a thousand aids to pleasure and health which they never dreamed of.

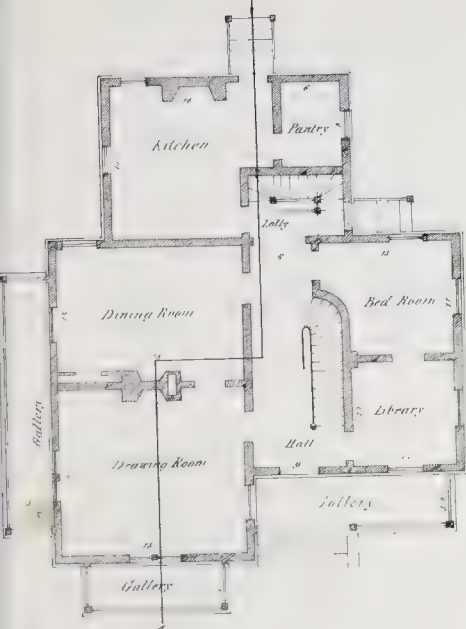
DESCRIPTION OF THE PLATES.

PLATE 49.—Ground plans of cellar, first and second stories and longitudinal section of Design XLVIII. The erection of this Design will require materials of the best quality and as follows: the cellar wall of quarry or bank stone, laid up 18 in. thick, and 7 ft. high, from the foundation—the dwarf walls may be 12 in. thick or of brick 8 in. thick—all the piers of hard brick, 8 in. square—broad foundations of stone for walls, chimneys and piers; two chimneys with 6 fire places and one flue, 8 by 12, from the first floor, with an opening to the cellar for ventilation—all the flues plastered and topped out the same as represented on Plate 51, Fig. 5; all the outside walls filled in with brick set on the edge; the first and second stories lathed and plastered two coats of brown mortar and hard finished—the cellar ceiling and attic lathed and plastered one coat and slipped; plaster cornices in the drawing-room and dining-room; two marble mantles and grates in first story and fire places for wood-fires in the kitchen and chambers; blue stone hearths, 3 ft. by 7 ft., in the kitchen, and 16 in. by 3 ft. in chambers; stone, brick and hearths laid in lime and sand mortar. Frame of sawed pine timber; the sills, posts, and plates, 4 by 9; framing beams, 4 by 8; interties, 4 by 6; first tier of beams, 3 by 9, second tier, 3 by 8, attic beams, 2 by 8; all 16 in. between centers; rafters, 3 by 7, and collar beams, 2 by 8, 2 ft. 8 in. between centers; floor timbers of gallery 3 by 7; studding, 3 by 4, 16 in. between centers; water table to project 3 inches; corner boards 1½ in. thick; siding of 5-8 narrow clear white pine, rebated and lapped 5 and 6 in. to the weather; the roof covered with clear white pine shingles, laid three thick on hemlock boards; veranda roof made with narrow clear planks, grooved both edges 5-8 deep and 1½ tongues put in with white lead; for cornices, brackets, gutters, veranda, balconies, &c. see details on Plate 51; four 3 in. leaders to conduct the water from gutters to waste; floors of galleries laid with narrow clear tongued and grooved pine plank, blind nailed; interior floor of good sound milled pine plank, clear of large and loose knots; base in attic ¾ thick, 4 in. high; for first and second stories see Figs. 10 and 11, Plate 51. Principal stairs, from first story to attic, 3 in. moulded rail, 1½ fancy turned balusters, 6 in. newel—all of mahogany; back stairs one story, 4 in. newels, 2 in. round rail and 1½ turned balusters, of mahogany, and all the steps moulded; doors in the first and second stories of main house to have curved heads and 4 panels each—1½ in. in first story and 1½ in. in second—all double faced; all the other doors 1½ in. thick, 4 panels, moulded one side—all the doors in first story of main house secured by 4½ in. mortice locks with American porcelain knobs, "blue star" pattern—in second story, 4 in. mortice locks and white porcelain knobs; in wing, 6 in. rim locks with mineral knobs; doors hung by 4 by 4 butts in first story; 3½ by 3½ in second story; and 3 by 3 in wing—and the architraves and casings the same as drawn on plate 59; window frames suitably made, to receive the sashes hung by parliament hinges, and secured by French grip bolts in first story, and blind vertical bolts in second story and wing, and 4 in. bolts to attic and cellar; sashes 1½ in. in first story; 1½ in. thick in wing and second story; and 1½ in. thick in cellar and attic—French glass in all the sashes, double thickness in first story; blinds moulded both sides, hung by welded straps and plates, and secured by patent fastenings to all the windows above the cellar; inside plank shutters hung by butts and secured by bolts to the cellar windows; pantries, closets, and presses shelved in the usual manner; wood mantles to three fire-places, and borders to all the hearths. All the wood-work inside and outside except shingle roof, mahogany, and interior floors to be painted two coats of pure white lead and linseed oil—the second coat shaded a French gray; the blinds three coats of bronzed green; stair-rails and balusters to have three coats of varnish.

PLATE 50.—Geometrical elevations of the front and one side of Design XLVIII.

PLATE 51.—Details of design XLVIII., Fig. 1, section of gable projection, ground section, and brackets; Fig. 2, profile section of the cornice, showing the gutters, moulding, plancere, fascia, plate, rafter, blind-bracket, sheathing and shingling; Figs. 3 and 4, sections of the roof, cornice, brackets, post, rails, balusters, and floor-fascia of

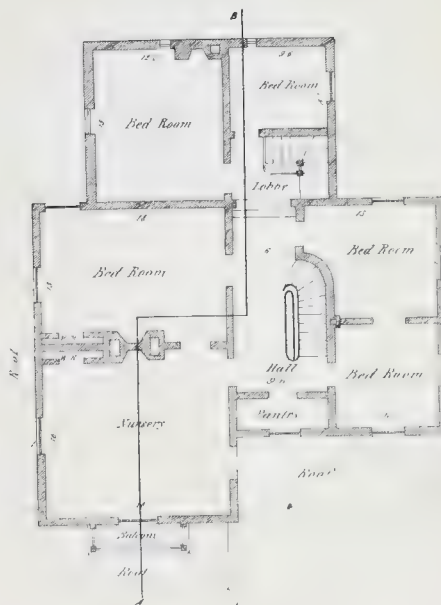
DESIGN XLVIII.



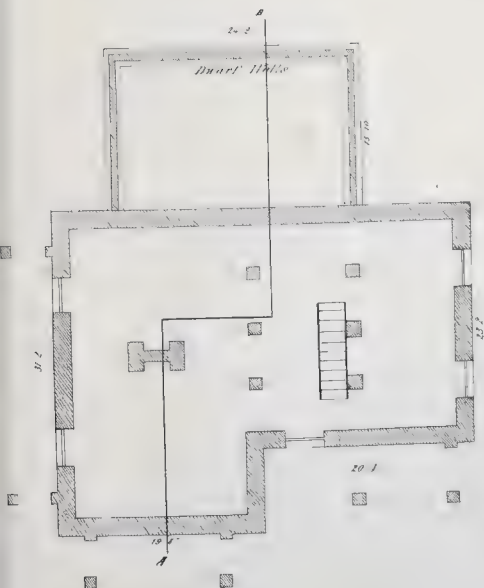
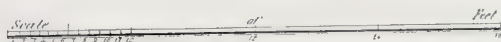
PLAN OF PRINCIPAL STORY

PLATE 49

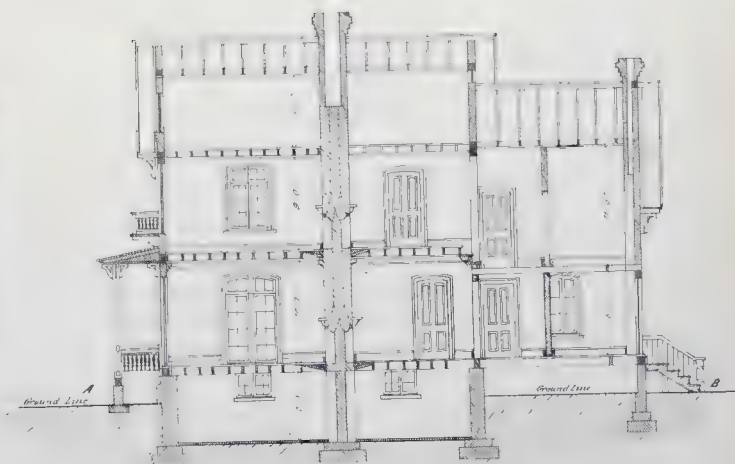
VOL. 2.



SECOND STORY



CELLAR



Longitudinal SECTION on line A B

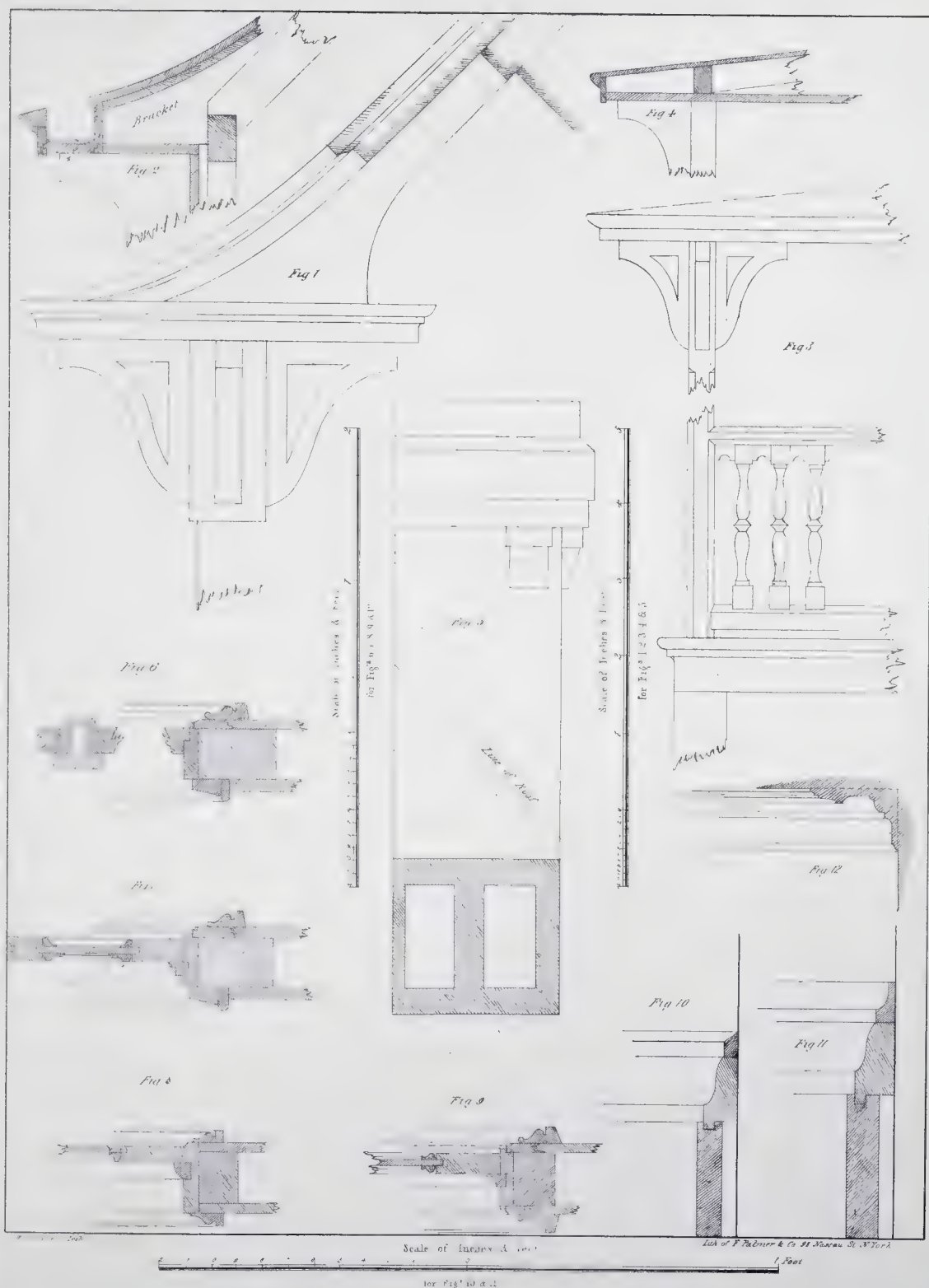
DESIGNED BY F. PALMER & CO. 98 NASSAU ST. N. Y.

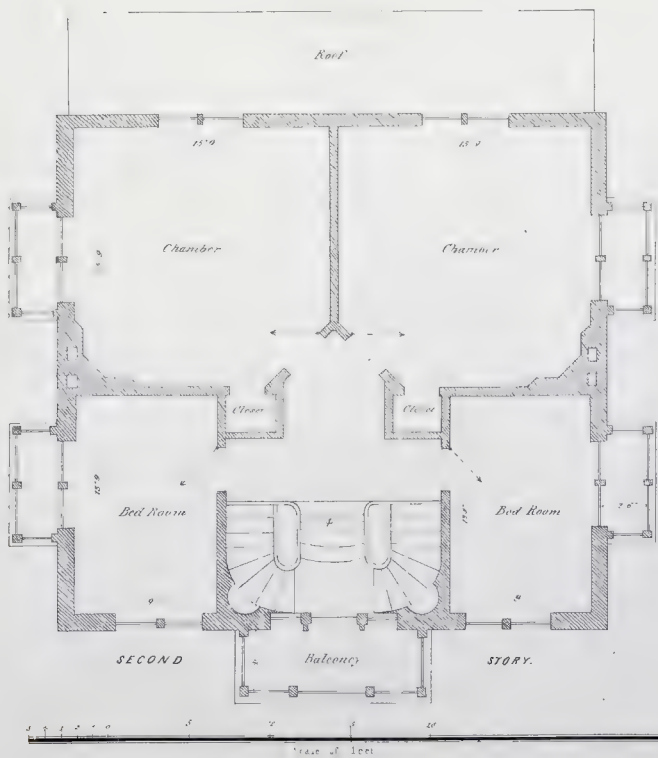
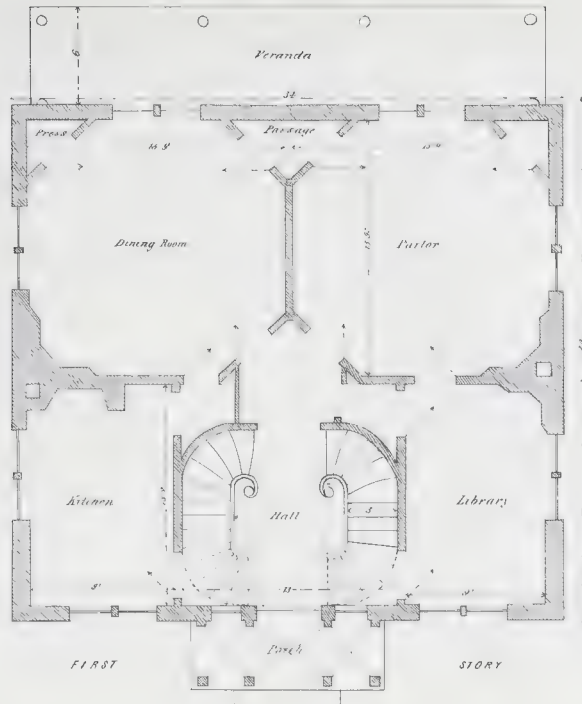


VILLA IN THE AMERICAN STYLE



FRONT ELEVATION





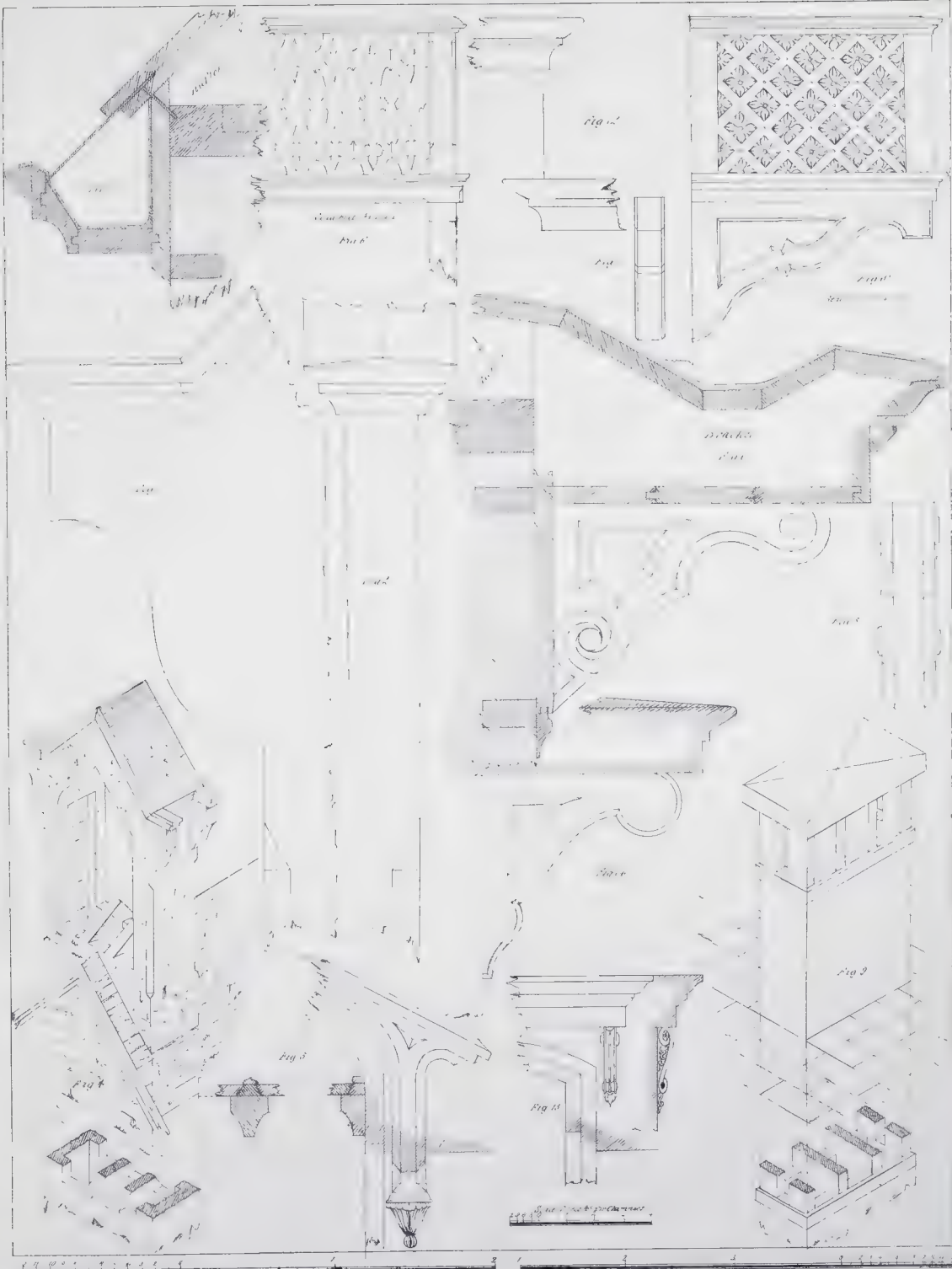


VILLA

DESIGN L



VILLA



Scale of Figs. 1 to 12

Scale of Figs. 1 to 12

the veranda or gallery; Fig. 5, ground plan and face section of chimney top; Fig. 6, ground plan of a window frame; Fig. 7, of the front door; Fig. 8, of a passage door in second story; Fig. 9, of a passage door in first story; Fig. 10, section of base for second story; Fig. 11, base for first story; Fig. 12, section of plaster cornice for the drawing and dining rooms.

PLATE 52.—Ground plan of the first and second stories of Design XLIX. and L.; the basement walls for these designs to be of stone, 7 ft. high, and 18 in. thick. Water-table of brown stone, 8 in. high; cut wash $2\frac{1}{2}$ inches projection; sills all of brown stone, cut and polished; superstructure walls of hard brick, 12 in. thick, laid close and with flush joints for painting; arches over the windows and doors. The roof of Design XLIX. of American slate; the dormer windows, balconies, veranda, window heads, and gable coping, all of wood, painted brown stone color, and the brick-work the same color; the roof of Design L., to be covered with best quality galvanized iron with ridge joints, the brackets, windows, balconies, porch antæ, and covering, all made of wood and painted two coats of brown paint, shaded the color of the brown stone.

PLATE 53.—Perspective views of two villas: Design XLIX., in the Old English or Tudor style,—and Design L., in the Greco-Italian style.

PLATE 54.—Details (Fig. 1; 2, 3, 4, 5, and 6) of Design XLIX., and (Figs. 7, 8, 9, 10, 11, 12, 13, and 14) of Design L. Fig. 1, and 2, section of corbel stone and gable coping; Fig. 3, cross section of cornice;—showing the mouldings, gutter, lining, fascia, plate, rafters, sheathing, and slating; Fig. 4, isometrical view and ground plan of the chimney, with a section of the main roof and gable; Fig. 5, plan and section of window-frame and label moulding; Fig. 6, section of balcony rail, filling, and floor; Figs. 7 and 8, profile section of main cornice, representing the fascia, plate, rafter, plancere, crown moulding, roof planking and covering, and the side and face of the bracket; Fig. 9, isometrical view and ground plan of the chimney; Figs. 10 and 11, side elevation of the balcony, and face of the bracket; Fig. 12, section of the hall window cap moulding; Fig. 13, face and profile section of window cap and truss; Fig. 14, profile section of cornice and bracket for the cupola.

TABLE,

SHOWING THE VARIOUS SIZES OF SLATE, AND THE NUMBER OF EACH REQUIRED TO LAY A SQUARE, AND THE NETT COST OF THE SAME, INCLUDING NAILS, PLANKING, &c.

| | |
|---|---------|
| 300 American slates, 8 by 14 inches, at \$20 00 per thousand, laid 6 inches to the weather; $10\frac{1}{2}$ milled planks, at 20 cts.; $6\frac{1}{2}$ lbs. 4d. nails, at 5 cts.; and $1\frac{3}{4}$ days' labor, at \$1 50, | \$10 67 |
| 258 American slates, 8 by 16 inches, at \$23 00 per thousand, laid 7 inches to the weather; $10\frac{1}{2}$ milled planks, at 20 cts.; 6 lbs. 4d. nails, at 5 cts.; and $1\frac{3}{4}$ days' labor, at \$1 50, | 10 58 |
| 258 Welsh slates, 8 by 16 inches, at \$26 00 per thousand, laid 7 inches to the weather; $10\frac{1}{2}$ milled planks, at 20 cts.; 6 lbs. 4d. nails, at 5 cts.; and $1\frac{3}{4}$ days' labor, at \$1 50, | 11 35 |
| 206 American slates, 10 by 16 inches, at \$28 00 per thousand, laid 7 inches to the weather; $10\frac{1}{2}$ milled planks, at 20 cts.; $5\frac{3}{4}$ lbs. 4d. nails, at 5 cts.; and $1\frac{3}{4}$ days' labor, at \$1 50, | 10 39 |
| 206 Welsh slates, 10 by 16 inches, at \$32 50 per thousand, laid 7 inches to the weather; $10\frac{1}{2}$ milled planks, at 20 cts.; $5\frac{3}{4}$ lbs. 5d. nails, at 5 cts.; and $1\frac{3}{4}$ days' labor, at \$1 50, | 11 33 |
| 192 American slates, 10 by 18 inches, at \$33 00 per thousand, laid $7\frac{1}{2}$ inches to the weather; $10\frac{1}{2}$ milled planks, at 20 cts.; $5\frac{1}{2}$ lbs. 5d. nails, at 5 cts.; and $1\frac{1}{2}$ days' labor, at \$1 50, | 10 96 |
| 192 Welsh slates, 10 by 18 inches, at \$37 50 per thousand, laid $7\frac{1}{2}$ inches to the weather; $10\frac{1}{2}$ milled planks, at 20 cts.; $5\frac{1}{2}$ lbs. 5d. nails, at 5 cts.; and $1\frac{1}{2}$ days' labor, at \$1 50, | 11 83 |
| 170 American slates, 10 by 20 inches, at \$38 00 per thousand, laid $8\frac{1}{2}$ inches to the weather; $10\frac{1}{2}$ milled planks, at 20 cts.; $5\frac{1}{2}$ lbs. 5d. nails, at 5 cts.; and $1\frac{1}{2}$ days' labor, at \$1 50, | 11 09 |
| 127 American slates, 12 by 22 inches, at \$52 00 per thousand, laid $9\frac{1}{2}$ inches to the weather; $10\frac{1}{2}$ milled planks, at 20 cts.; 5 lbs. 5d. nails, at 5 cts.; and $1\frac{1}{2}$ days' labor, at \$1 50, | 11 20 |
| 75 American slates, at 16 by 28 inches, at \$100 00 per thousand, laid 12 inches to the weather; $10\frac{1}{2}$ milled planks, at 20 cts.; $4\frac{3}{4}$ lbs. 6d. nails, at 5 cts.; and $1\frac{1}{2}$ days' labor, at \$1 50, | 12 09 |
| 70 American slates, 16 by 30 inches at \$120 00 per thousand, laid 13 inches to the weather; $10\frac{1}{2}$ milled planks, at 20 cts.; $4\frac{1}{2}$ lbs. 6d. nails, at 5 cts.; and $1\frac{1}{2}$ days' labor, at \$1 50, | 12 98 |

TABLE,
OF THE COST OF SASHES MADE AND GLAZED, WITH SEVERAL QUALITIES AND BRANDS OF GLASS
CYLINDER GLASS. CROWN GLASS. PLATE GLASS.

| Size. | AMERICAN. | | EN. SHEET | | FRENCH | | ENGLISH. | | AMERICAN. | | GERMAN. | | FRENCH. | | ENGLISH. | |
|----------|-----------|---------|-----------|---------|---------|---------|----------|---------|-----------|-----------|---------|----------|---------|---------|----------|----------|
| | Single. | Double. | Single. | Double. | Single. | Double. | Single. | Double. | Redford. | Saratoga. | German. | Crystal. | French. | and | British. | English. |
| | cts. | cts. | cts. | cts. | cts. | cts. | \$ cts. | \$ cts. | \$ cts. | \$ cts. | \$ cts. | \$ cts. | \$ cts. | \$ cts. | \$ cts. | \$ cts. |
| 6 by 8 | 7 | 9 | | | 8 | 10 | | | | | | | | | | |
| 7 by 9 | 8 | 10 | | | 11 | 13 | | | | | | | | | | |
| 8 by 10 | 10 | 12 | | | 13 | 15 | | | | | | | | | | |
| 9 by 11 | 12 | 15 | 14 | 19 | 15 | 22 | | | 25 | 23 | | | | | | |
| 9 by 12 | 13 | 16 | 15 | 20 | 16 | 22 | 18 | 25 | 26 | 24 | | | | | | |
| 9 by 13 | 14 | 17 | 16 | 21 | 17 | 22 | 19 | 28 | 27 | 25 | | | | | | |
| 9 by 14 | 16 | 19 | 18 | 23 | 18 | 23 | 21 | 31 | 29 | 27 | | | | | | |
| 10 by 12 | 13 | 17 | 15 | 21 | 17 | 19 | 19 | 28 | 26 | 24 | | | | | | |
| 10 by 13 | 15 | 19 | 17 | 22 | 17 | 20 | 20 | 32 | 26 | 24 | | | | | | |
| 10 by 14 | 16 | 21 | 18 | 22 | 18 | 21 | 22 | 35 | 27 | 25 | | | 55 | | | |
| 10 by 15 | 18 | 23 | 20 | 23 | 20 | 22 | 24 | 37 | 28 | 26 | | | 60 | | | |
| 10 by 16 | 19 | 25 | 21 | 25 | 22 | 24 | 25 | 40 | 30 | 28 | | | 65 | | | |
| 11 by 12 | 18 | 25 | 23 | 28 | 26 | 28 | 20 | 30 | 37 | 33 | | | 55 | | | 46 |
| 11 by 13 | 19 | 25 | 24 | 31 | 25 | 28 | 22 | 34 | 37 | 33 | | | 60 | | | 55 |
| 11 by 14 | 19 | 25 | 25 | 32 | 25 | 28 | 24 | 37 | 37 | 33 | | | 65 | | | 63 |
| 11 by 15 | 20 | 26 | 26 | 33 | 28 | 30 | 25 | 40 | 40 | 38 | | | 70 | 1 05 | | 66 |
| 11 by 16 | 21 | 27 | 26 | 34 | 28 | 30 | 27 | 44 | 45 | 44 | | | 75 | 1 15 | | 80 |
| 11 by 17 | 22 | 28 | 28 | 40 | 29 | 31 | 29 | 48 | 50 | 48 | | | 85 | 1 25 | | 85 |
| 11 by 18 | 23 | 30 | 28 | 40 | 30 | 33 | 31 | 51 | 55 | 52 | | | 95 | 1 30 | | 90 |
| 12 by 14 | 20 | 26 | 25 | 34 | 26 | 28 | 25 | 41 | 50 | 41 | | | 70 | 1 10 | | 70 |
| 12 by 15 | 22 | 28 | 26 | 36 | 26 | 29 | 27 | 44 | 55 | 44 | | | 75 | 1 18 | | 85 |
| 12 by 16 | 23 | 29 | 27 | 37 | 27 | 29 | 29 | 48 | 60 | 48 | | | 85 | 1 25 | | 90 |
| 12 by 17 | 24 | 31 | 28 | 40 | 27 | 32 | 31 | 51 | 65 | 52 | | | 95 | 1 35 | | 95 |
| 12 by 18 | 25 | 34 | 30 | 40 | 29 | 34 | 31 | 55 | 70 | 56 | 1 00 | | 1 00 | 1 45 | | 1 00 |
| 12 by 19 | 28 | 38 | 31 | 43 | 30 | 36 | 31 | 60 | 75 | 60 | 1 10 | | 1 10 | 1 55 | | 1 10 |
| 12 by 20 | 30 | 38 | 34 | 44 | 32 | 38 | 36 | 62 | 80 | 64 | 1 15 | | 1 15 | 1 65 | | 1 20 |
| 12 by 22 | 32 | 44 | 36 | 48 | 31 | 41 | 41 | 66 | 90 | 73 | 1 27 | | 1 27 | 1 80 | | 1 25 |
| 12 by 24 | 36 | 50 | 38 | 55 | 38 | 44 | 48 | 72 | 1 00 | 84 | 1 40 | | 2 00 | 1 40 | | 1 40 |
| 13 by 15 | 24 | 32 | 30 | 40 | 30 | 34 | 41 | 55 | 60 | 48 | 85 | | 1 30 | 90 | | 95 |
| 13 by 16 | 25 | 33 | 31 | 42 | 31 | 36 | 45 | 60 | 65 | 52 | 1 00 | | 1 40 | 1 40 | | 1 00 |
| 13 by 17 | 27 | 35 | 33 | 44 | 33 | 38 | 50 | 65 | 70 | 56 | 1 10 | | 1 55 | 1 55 | | 1 10 |
| 13 by 18 | 29 | 37 | 36 | 45 | 35 | 40 | 58 | 70 | 75 | 60 | 1 15 | | 1 70 | 1 70 | | 1 10 |
| 13 by 19 | 32 | 40 | 40 | 52 | 38 | 44 | 60 | 73 | 80 | 64 | 1 25 | | 1 75 | 1 75 | | 1 20 |
| 13 by 20 | 35 | 42 | 40 | 54 | 40 | 46 | 65 | 76 | 85 | 70 | 1 35 | | 1 90 | 1 90 | | 1 30 |
| 13 by 22 | 37 | 48 | 44 | 62 | 42 | 48 | 70 | 86 | 1 00 | 80 | 1 40 | | 2 10 | 2 10 | | 1 40 |
| 13 by 23 | 38 | 50 | 46 | 64 | 42 | 50 | 80 | 98 | 1 10 | 90 | 1 58 | | 2 25 | 2 25 | | 1 50 |
| 13 by 24 | 39 | 50 | 48 | 66 | 44 | 52 | 85 | 1 13 | 1 20 | 1 00 | 1 68 | | 2 40 | 2 40 | | 1 60 |
| 13 by 26 | 41 | 60 | 50 | 70 | 46 | 54 | 90 | 1 30 | 1 37 | 1 12 | 1 80 | | 2 55 | 2 55 | | 1 80 |
| 13 by 28 | 43 | 70 | 60 | 80 | 48 | 56 | 1 00 | 1 40 | 1 50 | 1 27 | 2 00 | | 2 70 | 2 70 | | 2 00 |
| 14 by 17 | 29 | 40 | 37 | 48 | 35 | 40 | 58 | 70 | 75 | 60 | 1 25 | | 1 70 | 1 70 | | 1 10 |
| 14 by 18 | 32 | 42 | 38 | 48 | 38 | 43 | 60 | 73 | 80 | 64 | 1 30 | | 1 85 | 1 85 | | 1 20 |
| 14 by 19 | 35 | 46 | 40 | 52 | 40 | 46 | 62 | 76 | 85 | 70 | 1 38 | | 1 95 | 1 95 | | 1 25 |
| 14 by 20 | 37 | 46 | 42 | 55 | 42 | 48 | 66 | 80 | 90 | 73 | 1 45 | | 2 10 | 2 10 | | 1 35 |
| 14 by 21 | 38 | 48 | 44 | 58 | 44 | 50 | 70 | 86 | 98 | 80 | 1 60 | | 2 20 | 2 20 | | 1 45 |
| 14 by 22 | 40 | 50 | 46 | 58 | 46 | 52 | 74 | 92 | 1 12 | 90 | 1 70 | | 2 35 | 2 35 | | 1 60 |
| 14 by 23 | 41 | 52 | 50 | 66 | 49 | 55 | 82 | 1 10 | 1 20 | 1 00 | 1 80 | | 2 05 | 2 05 | | 1 75 |
| 14 by 24 | 46 | 52 | 51 | 70 | 50 | 57 | 88 | 1 20 | 1 30 | 1 10 | 1 85 | | 2 06 | 2 06 | | 1 85 |
| 14 by 25 | 48 | 60 | 55 | 75 | 53 | 61 | 95 | 1 30 | 1 40 | 1 20 | 1 90 | | 2 75 | 2 75 | | 1 95 |
| 14 by 26 | 50 | 60 | 55 | 75 | 55 | 63 | 1 02 | 1 35 | 1 50 | 1 25 | 2 10 | | 2 95 | 2 95 | | 2 10 |
| 14 by 27 | 54 | 70 | 60 | 85 | 58 | 65 | 1 10 | 1 40 | 1 60 | 1 30 | 2 37 | | 3 20 | 3 20 | | 2 20 |

TABLE.—CONTINUED.

75

| Size | CYLINDER GLASS. | | | | | | CROWN GLASS. | | | | PLATE GLASS. | | | |
|----------|-----------------|---------|------------|---------|---------|---------|--------------|---------|-----------|----------|-------------------|---------------------------|----------------------|--|
| | AMERICAN. | | ENG. SHEET | | FRENCH. | | ENGLISH. | | AMERICAN. | | German Crystal | French and British. | English Chance's. | |
| | Single. | Double. | Single. | Double. | Single. | Double. | Single. | Double. | Redford. | Stranne. | | | | |
| | \$ cts. | \$ cts. | \$ cts. | \$ cts. | \$ cts. | \$ cts. | cts. | \$ cts. | \$ cts. | \$ cts. | | | | |
| 15 by 18 | 35 | 42 | 42 | 46 | 40 | 46 | 62 | 76 | 85 | 65 | 1 50 | 2 20 | 1 50 | |
| 15 by 19 | 37 | 44 | 44 | 48 | 42 | 48 | 65 | 80 | 90 | 70 | 1 55 | 2 40 | 1 55 | |
| 15 by 20 | 38 | 44 | 44 | 48 | 44 | 48 | 70 | 86 | 95 | 75 | 1 60 | 2 40 | 1 60 | |
| 15 by 21 | 40 | 46 | 48 | 50 | 46 | 50 | 74 | 92 | 1 05 | 80 | 1 68 | 2 85 | 1 68 | |
| 15 by 22 | 41 | 48 | 50 | 50 | 46 | 50 | 82 | 1 03 | 1 10 | 85 | 1 80 | 2 85 | 1 80 | |
| 15 by 23 | 42 | 50 | 55 | 52 | 48 | 52 | 92 | 1 20 | 1 25 | 90 | 2 00 | 3 15 | 2 00 | |
| 15 by 24 | 42 | 64 | 64 | 66 | 44 | 66 | 1 25 | 1 50 | 1 15 | 2 00 | 3 15 | 2 00 | | |
| 15 by 25 | 44 | 66 | 66 | 68 | 46 | 68 | 1 30 | 1 70 | 1 25 | 2 25 | 3 55 | 2 25 | | |
| 15 by 26 | 46 | 68 | 68 | 70 | 48 | 70 | 1 50 | 1 95 | 1 55 | 2 50 | 3 75 | 2 50 | | |
| 15 by 27 | 48 | 70 | 70 | 72 | 50 | 72 | 1 60 | 2 20 | 1 70 | 2 75 | 4 20 | 2 75 | | |
| 15 by 28 | 50 | 72 | 72 | 74 | 52 | 74 | 1 70 | 2 25 | 1 80 | 2 75 | 4 20 | 2 75 | | |
| 15 by 29 | 52 | 74 | 74 | 76 | 54 | 76 | 1 90 | 2 50 | 1 90 | 3 30 | 4 70 | 3 30 | | |
| 15 by 30 | 54 | 76 | 76 | 78 | 56 | 78 | 1 95 | 2 70 | 2 00 | 3 30 | 4 70 | 3 30 | | |
| 16 by 18 | 37 | 59 | 59 | 61 | 39 | 61 | 80 | 90 | 70 | 1 50 | 2 30 | 1 50 | | |
| 16 by 20 | 39 | 61 | 61 | 63 | 41 | 63 | 92 | 1 05 | 80 | 1 65 | 2 60 | 1 65 | | |
| 16 by 22 | 41 | 63 | 63 | 66 | 43 | 66 | 1 10 | 1 20 | 90 | 1 89 | 3 00 | 1 89 | | |
| 16 by 24 | 43 | 65 | 65 | 68 | 45 | 68 | 1 30 | 1 70 | 1 20 | 2 30 | 3 50 | 2 30 | | |
| 16 by 26 | 45 | 65 | 65 | 80 | 50 | 80 | 1 50 | 1 95 | 1 55 | 2 25 | 3 75 | 2 25 | | |
| 16 by 28 | 47 | 69 | 69 | 1 00 | 60 | 1 00 | 1 70 | 2 45 | 1 80 | 2 75 | 4 50 | 2 75 | | |
| 16 by 30 | 60 | 1 00 | 70 | 1 30 | 80 | 1 30 | 1 95 | 2 70 | 2 00 | 3 30 | 5 00 | 3 30 | | |
| 16 by 32 | 70 | 1 10 | 80 | 1 35 | 85 | 1 35 | | | | 4 45 | 5 50 | 4 45 | | |
| 17 by 21 | 42 | 64 | 64 | 75 | 46 | 75 | 1 13 | 1 30 | 1 00 | 2 25 | 3 50 | 2 25 | | |
| 17 by 24 | 44 | 66 | 66 | 77 | 48 | 77 | 1 40 | 1 80 | 1 40 | 2 37 | 4 00 | 2 37 | | |
| 17 by 26 | 50 | 76 | 90 | 89 | 55 | 89 | 1 70 | 2 20 | 1 70 | 2 75 | 4 73 | 2 27 | | |
| 17 by 28 | 60 | 98 | 1 10 | 1 02 | 69 | 1 02 | 1 95 | 2 70 | 1 90 | 3 00 | 5 00 | 3 00 | | |
| 17 by 30 | 70 | 1 00 | 1 30 | 1 30 | 80 | 1 30 | 2 20 | 2 90 | 2 60 | 3 30 | 5 60 | 3 30 | | |
| 17 by 32 | 82 | 1 10 | 1 40 | 1 40 | 90 | 1 40 | | | | 4 45 | 6 00 | 4 45 | | |
| 17 by 36 | 90 | 1 60 | 1 60 | 1 90 | 1 05 | 1 90 | | | | 6 50 | 7 00 | 6 50 | | |
| 18 by 22 | 46 | 70 | 82 | 78 | 50 | 78 | 1 30 | 1 60 | 1 15 | 2 25 | 3 60 | 2 25 | | |
| 18 by 24 | 48 | 74 | 84 | 85 | 55 | 85 | 1 50 | 1 95 | 1 45 | 2 37 | 3 90 | 2 37 | | |
| 18 by 26 | 55 | 85 | 1 00 | 95 | 60 | 95 | 1 70 | 2 20 | 1 70 | 2 75 | 4 60 | 2 75 | | |
| 18 by 28 | 59 | 95 | 1 08 | 1 00 | 65 | 1 00 | 1 95 | 2 70 | 1 95 | 3 00 | 4 85 | 3 00 | | |
| 18 by 30 | 63 | 1 00 | 1 16 | 1 20 | 68 | 1 20 | 2 25 | 3 00 | 2 40 | 3 30 | 5 40 | 3 30 | | |
| 18 by 32 | 75 | 1 20 | 1 25 | 1 40 | 80 | 1 40 | | | | 4 45 | 6 00 | 4 45 | | |
| 18 by 34 | 82 | 1 40 | 1 40 | 1 50 | 90 | 1 50 | | | | 5 50 | 6 50 | 5 50 | | |
| 18 by 36 | 1 00 | 1 77 | 1 90 | 2 20 | 1 20 | 2 20 | | | | 6 50 | 7 00 | 6 50 | | |
| 19 by 25 | 48 | 86 | 86 | 90 | 52 | 90 | | | | 3 31 | 5 15 | 3 31 | | |
| 19 by 27 | 60 | 92 | 1 20 | 1 04 | 64 | 1 04 | | | | 3 50 | 5 70 | 3 50 | | |
| 19 by 29 | 70 | 1 00 | 1 40 | 1 16 | 74 | 1 16 | | | | 3 50 | 6 20 | 3 50 | | |
| 19 by 30 | 88 | 1 40 | 1 76 | 1 45 | 92 | 1 45 | | | | 4 20 | 6 20 | 4 20 | | |
| 19 by 33 | 1 00 | 1 50 | 2 00 | 1 65 | 95 | 1 65 | | | | 5 50 | 7 35 | 5 50 | | |
| 19 by 35 | 1 00 | 1 75 | 2 40 | 2 20 | 1 20 | 2 20 | | | | 6 30 | 7 90 | 6 50 | | |
| 20 by 32 | 95 | 1 70 | 2 00 | 1 75 | 1 04 | 1 75 | | | | 4 75 | 6 80 | 4 75 | | |
| 20 by 36 | 1 00 | 1 85 | 2 40 | 2 29 | 1 29 | 2 29 | | | | 6 55 | 7 90 | 6 55 | | |
| 21 by 40 | 1 75 | 3 00 | 3 00 | 3 25 | 1 81 | 3 25 | | | | 8 00 | 10 30 | 8 00 | | |
| 22 by 36 | 1 25 | 2 00 | 2 40 | 2 35 | 1 36 | 2 35 | | | | 6 50 | 9 00 | 6 50 | | |
| 22 by 40 | 1 75 | 3 00 | 3 00 | 3 25 | 1 90 | 3 25 | | | | 8 00 | 10 30 | 8 00 | | |
| 22 by 44 | 2 00 | 3 50 | 4 00 | 4 00 | 2 50 | 4 00 | | | | 11 50 | 14 00 | 11 50 | | |
| 22 by 48 | 3 00 | 5 25 | 5 25 | 5 50 | 3 25 | 5 50 | | | | | | | | |
| 23 by 40 | 2 00 | 3 50 | 3 50 | 3 75 | 2 25 | 3 75 | | | | | | | | |
| 23 by 46 | 3 00 | 5 25 | 5 25 | 5 50 | 3 25 | 5 50 | | | | | | | | |

The foregoing list of prices are for sashes, to hang by weights and cords: for folding sashes with rebated or ruled joints, add 8 cts. per light for all under 11 by 15; 12 cts. per light over 11 by 15 and under 12 by 18; 16 cts. per light over 12 by 18, and under 14 by 22; and 20 cts. per light, for all over. Sashes of the following thickness:—from 6 by 8 to 10 by 14, $1\frac{1}{4}$ inches thick; to 12 by 18, $1\frac{1}{2}$ inches thick; to 15 by 30, $\frac{3}{4}$ inch thick, and 2 inches thick for all over.

. The Estimate for Green-house and Vinery, referred to on page 68, will be found on page 70.

TABLE,

SHOWING THE QUALITY, SIZE AND NUMBER OF SHINGLES REQUIRED TO LAY A SQUARE.

| | |
|--|--|
| Hemlock shingles, 500 per bunch, 4 inches wide, 18 inches long, laid 6 in. to the weather, require 11-5 bunch. | |
| Pine " 500 " " 4 " " 18 " " 6 " " " " 11-5 " | |
| Cypress " 100 " " 6 " " 20 " " 6 " " " " 3 3/4 " | |
| Cedar " 100 " " 6 " " 20 " " 6 " " " " 3 3/4 " | |
| Cypress " " " M. 7 " " 24 " " 8 " " " " 258 " | |
| Cedar " " " 7 " " 24 " " 8 " " " " 258 " | |
| Cypress " " " 8 " " 30 " " 10 " " " " 180 " | |
| Cedar " " " 8 " " 30 " " 10 " " " " 180 " | |

NUMBER OF BOARDS AND FEET OF LATH, AND THE NUMBER OF NAILS AND SIZES TO A SQUARE OF SHINGLING.

| | |
|--|--|
| Hemlock shingles, 4 inches wide, 18 inches long, laid 6 inches to the weather, require 10 1/2 boards and 1200 5d. nails. | |
| Pine " 4 " " 18 " " 6 " " " 10 1/2 " " 1200 5d. " | |
| Cypress " 6 " " 20 " " 6 1/2 " " " 190 ft. lath, 740 6d. " | |
| Cedar " 6 " " 20 " " 6 1/2 " " " 190 " " 740 6d. " | |
| Cypress " 7 " " 24 " " 8 " " " 160 " " 516 6d. " | |
| Cedar " 7 " " 24 " " 8 " " " 160 " " 516 6d. " | |
| Cypress " 8 " " 30 " " 10 " " " 130 " " 360 8d. " | |
| Cedar " 8 " " 30 " " 10 " " " 130 " " 360 8d. " | |

NETT COST OF A SQUARE OF SHINGLE ROOFING.

| | |
|---|--|
| 600 hemlock shingles, at \$1 75 per bunch; 10 1/2 hlk. boards, at 12 1/2 cts.; 7 1/2 lbs. nails, at 5 cts.; 1 day's labor, \$1 50, \$5 30 | |
| 600 pine " " 2 50 " 10 1/2 hlk. " " 12 1/2 cts.; 7 1/2 lbs. " " 5 cts.; 1 " " 1 50, 6 20 | |
| 370 cypress " " 1 20 " 190 ft. lath. " " cts.; 6 lbs. " " 5 cts.; 3 " " 1 50, 7 28 | |
| 370 cedar " " 1 70 " 190 " " " cts.; 6 lbs. " " 5 cts.; 3 " " 1 50, 9 13 | |
| 258 cypress " " 15 00 M. 160 " " " cts.; 4 1/2 lbs. " " 5 cts.; 3 " " 1 50, 6 23 | |
| 258 cedar " " 24 00 " 160 " " " cts.; 4 1/2 lbs. " " 5 cts.; 3 " " 1 50, 8 57 | |
| 180 cypress " " 23 00 " 130 " " " cts.; 5 lbs. " " 5 cts.; 1/2 " " 1 50, 5 93 | |
| 180 cedar " " 30 00 " 130 " " " cts.; 5 lbs. " " 5 cts.; 1/2 " " 1 50, 7 32 | |

ESTIMATE

Of the Materials and Labor required in the Erection of Design XLVIII.

| | | | |
|--|---|--------|-----------|
| 291 cubic yds. excavation, - - \$ 10 | \$ 29 10 11 steps and platform complete, - | \$1 30 | \$14 30 |
| 1587 cubic ft. stone work, - - 10 | 158 70 4 window frs. and sashes, 20 lts., 12 by 20, 12 00 | 48 00 | |
| 17236 salmon brick for filling, laid, - 8 00 | 137 88 3 " " " 20 " 12 by 20, 9 00 | 27 00 | |
| 14000 hard brick for chimneys, " - 10 00 | 140 06 4 " " " 20 " 10 by 20, 8 00 | 32 00 | |
| 2118 " dwarf walls, " - 8 00 | 16 94 1 " " " 16 " 12 by 20, " " | 8 50 | |
| 2 grates set, \$8 50; 6 stove pipe rings, 30 | 18 80 4 " " " 16 " 12 by 16, 6 00 | 24 00 | |
| 727 yards plastering, - - 25 | 181 75 5 " " " 16 " 10 by 16, 5 00 | 25 00 | |
| 230 ft. plaster cornice, - - 25 | 57 50 3 " " " 6 " 10 by 16, 4 50 | 13 50 | |
| 5 window sills, - - 40 | 2 00 2 " " " 6 " 8 by 10, 4 00 | 8 00 | |
| 9536 ft. timber, framed, - - 2 00 | 190 72 5 " " " 8 " 8 by 10, 4 50 | 22 50 | |
| 3613 ft. siding, - - 6 | 216 78 2 dor. windows " 6 " 10 by 16, 15 00 | 30 00 | |
| 300 " narrow floor, - - 8 1/2 | 25 50 6 veranda columns, - - | 3 00 | 18 00 |
| 2100 " pine " - - 4 | 81 00 6 half " - - | 2 00 | 12 00 |
| 1000 " common " - - 3 | 30 00 132 ft. rail to veranda, - - | 25 | 33 00 |
| 290 joist, - - 18 | 52 20 116 3 inch balusters, - - | 25 | 29 00 |
| 21 ft. blue stone hearth, - - 16 | 3 36 Front door and head light, complete, - | | 20 00 |
| 8 " " " - - 31 | 2 48 6 doors, complete, - - | 10 00 | 60 00 |
| 2150 ft. shingling, - - 8 | 172 00 15 " " - - | 8 00 | 120 00 |
| 273 ft. base, - - 6 | 16 38 Shelving 3 pantries, - - | 2 50 | 7 50 |
| 360 " " - - 4 1/2 | 16 20 4 wood mantles and hearth borders, - | 4 50 | 18 00 |
| 54 steps and risers complete, - - 1 25 | 67 50 75 feet 3 inch tin leader, - - | 10 | 7 50 |
| 235 ft. main cornice, - - 30 | 70 50 Painting, - - | | 130 00 |
| 55 " veranda " - - 25 | 13 75 | | |
| 33 brackets, 90 c.; 39 brackets, - - 25 | 39 45 | | \$2451 29 |

Design XLVIII. will cost \$2451 29; Design XLIX. will cost \$5420 00; and Design L. will cost \$4935.



SHADOWS.

THE chief element of beauty in Architecture is shadow; deprive any structure of its light and shade, and it becomes tame, cheerless, and unattractive; yet so palpable a truth appears to have been hardly recognized, even by those whose works show it most palpably. It is said that Sir JOHN VANDRUGH was the first architect who brought to his art the feeling of a painter, by which is meant, probably, that he was the first to perceive that masses of light and shade were necessary to the production of a picturesque effect in building. It was a strange thing to say of a modern architect when the world is full of structures that prove the existence of the same feeling in every one whose works have survived him. The Pyramids were certainly not constructed to produce a picturesque effect: a simple majesty of outline being the only thing aimed at by the architect, whose object was to impress the beholder with a sense of endurance, and not to amuse or gratify the sense by picturesque forms. The effect of the Pyramids on the beholder is represented by the author of *EORHEN*, as oppressive: the vast simplicity of the structure weighs heavily upon the feelings, and produces a crushing sensation which that lively writer compared to a recollection of a terrific nightmare, which he once suffered from. A feeling like this, it is very plain, should not be produced by any building intended for domestic or social uses. A fortress or a prison might fitly be built with ponderous walls destitute of shadows, as an appearance of strength and durability are the requisites of such structures. Churches, which should be productive of devotional feelings, that are nearly allied to the state of gratification produced by objects of beauty, should never be of that shadowless and oppressive style that has often been employed by architects from a want of knowledge of the true sources of beauty in architecture. But, if such a style is unsuited to a church, how much more unsuitable is it for a hotel; yet we have seen hotels so built with shadowless façades as though the architect had striven to give them the appearance of prisons. In a small house a plain front gives an appearance of meanness and nakedness, which should never characterize a building intended for social enjoyment. There can be no shadows where there are no projections nor unevennesses of surface, and where these can produce no shadows they are a surplussage and a waste, when not required to perform some useful office. The north side of the great cathedral of Cologne is entirely destitute

of ornaments, while the south side is richly incressed with them. The reason for this has been, for a long time, a mystery to architectural essayists, who have endeavored to account for it by various speculations; and many ingenious theories have been suggested in relation to it. The real truth was too simple and palpable to be discerned by these wiseacres, who wished to find in it something religious and symbolical. They did not know that a great architect like Nature herself, never throws away materials, nor creates any thing in vain. The reason why the architect of Cologne Cathedral placed no ornaments on the north side of that immense structure was, because being always in shadow they would be of no use. In their attempts to imitate the Greek style of architecture, our builders, by leaving out of their designs the sculptures which relieved the naked tympanums of the pediments, have produced the naked outline of the Greek temples without the dressings, which gave them all their beauty. Nothing can be conceived more cold and naked in effect than the white marble Custom Houses of Philadelphia and New York, with their naked tympanums, and bald metopes.

Of late years the value of Shadows appears to be better understood than formerly, and a richer and more cheerful style of architecture has been adopted in our city and country houses; and churches have been relieved of their naked, and barn-like character, by the addition of a variety of mouldings, and grotesque scroll work, which, if not always in keeping, give promise of an improving taste, and of a something better to come. The attempt at ornamentation has been, in many cases, carried to an excess which produces an effect amounting almost to burlesque; but the true uses of ornament are better understood, and the more recently constructed houses of New York, and the neighborhood display, in many instances, examples of purity and refined taste, which cannot but have the due effect on the public.

City Houses, being seen in long rows, and rarely disconnected from other buildings, do not exhibit their defects so palpably as villas, which stand apart by themselves, and unless particularly concealed by shrubbery, expose their nakedness and defects to all observers. It is of much greater importance, therefore, that a country house shall be free from defects of construction and decoration, than a city dwelling, which may escape observation from being seen in good company.

Design LII., No. in Plate 60, a Villa in the Anglo-Swiss style, will give a good illustration of what is meant by the value of shadows; the play of light and shade, by breaking up the broad mass of surface, by leaving the timber exposed after the manner of the old timber houses which abound in England and France, give to the whole house an aspect of cheerfulness and warmth which it would not otherwise possess. The means by which this effect is produced are simple and uncostly. The Cottage Villa, in the early English style, Design, No. LIII., in the same Plate, looks grave, and almost sombre, when compared with the one above it. They are, in fact, precisely the same plan, but only varied in the outer dressings. The steep-roofed Villa is better adapted to the North, while the flattened roof, and the wide-projecting eaves of the other, mark it as designed for a milder latitude. The two designs on plate 53, also show the marked difference in the character of a house, by merely increasing or lessening the shadows, or by breaking them up into alternations of light and shade. The dormer windows in Design No. XLIX., are of novel construction. By giving them a few inches projection beyond the eaves, they not only give greater room to the attic, but serve as a protection for the windows beneath, and break up the straight lines of the roof.

There is nothing more unpicturesque and offensive to the eye in architectural designs, whether in the interior or exterior of houses, than a smooth colorless surface. Time abhors such sights as much as Nature abhors a vacuum, and never fails to reprove such instances of ill taste, by inflicting on them stains and cracks, and breaking up their monotony by covering them with mosses or spider's web. As the diamond gains new lustre and brilliancy by having its surface cut into points, so do the walls of a house gain in beauty by being properly broken up into compartments of light and shade, or by a variety of colors; yet in many of our public edifices, and the greater part of private houses, the great aim appears to have been to produce a dull monotony of surface in the interior by colorless walls, and on the outside by not suffering a projection, when it could be avoided, that would cast a shadow. The majority of the houses in Philadelphia are singularly defective in this respect: the builders of that right-angled city appear to have been as much in fear of shadows as Richard the Third was on the night preceding the Battle of Bosworth Field.

The wood engraving which is placed at the head of these remarks, is a representation of a commodious Villa, recently designed for JAMES P. SWAIN Esq., of Westchester, in this State, and built on a very lovely site, about twenty miles from Harlem, at Bronxville, on the Bronx river.



The above engraving represents a villa designed for MESSRS. G. & H. DEXTER, ESQs., of New York. It is built on 80th street, and is well adapted, to the present suburban character of the neighborhood, while it is not unsuited to take its place in the long rows of city houses, which must inevitably crowd themselves around it. Taste improves as the city expands, and every new street and avenue that is built upon, offers a new field for improvement in Architecture, and the constant addition to the habitations of our citizens, affords opportunities for the display of Architectural talent, and the genius of the new race of builders. In spite of the cupidity of speculators, and the parsimony of landlords, who only look to the percentage in their investments in real estate; the intelligence of the age, and the universal diffusion of education call forth exhibitions of liberality, and even magnificence, in the construction of private houses that would have astounded our ancestors. Even the houses built expressly for the accommodation of the poor, in the new avenues of the city, exhibit a degree of external elegance that would be looked for in vain in some of the best houses of Broadway, which were built thirty or forty years since.

ESTIMATE

Of Green-House and Vinery.

| | | | | |
|----------------------------------|-------|---|--------|-----------|
| 76 yds. excavation, - | \$ 10 | \$7 60 734 ft. siding, - | - \$ 7 | \$51 38 |
| 2010 cubic ft. stone work, - | 8 | 160 80 90 " iron hot water pipe, - | - 50 | 45 00 |
| 2155 hard brick, laid, - | 8 00 | 17 24 Cast iron water back, - | - | 10 00 |
| 2150 salmon brick for filling, - | 6 00 | 12 90 Reservoir, - | - | 22 00 |
| 54 12 by 14 tiles, - | 23 | 12 42 30 ft. tin leader, - | - 12 | 3 60 |
| 2 " " corner, - | 40 | 80 Pump, \$6; 12 ft. lead pipe, - | - 25 | 9 00 |
| 20 pan tiles, - | 28 | 5 60 787 ft. roof sashes for vinery, - | - 20 | 157 40 |
| 3 slabs, 10 by 20 by 14 - | 1 00 | 3 00 533 " " green-house, - | - 20 | 106 60 |
| 4 blocks, 16 inches, - | 25 | 1 00 144 light sash glazed, 9 by 12, in vinery, - | - 15 | 21 60 |
| 4 " 12 " - | 18 | 72 430 " " " 8 by 11, " - | - 14 | 60 20 |
| 160 ft. flagging, - | 14 | 22 40 10 frames for vinery, - | - 8 00 | 80 00 |
| Iron door and grating, - | - | 11 00 9 " " " - | - 4 00 | 36 00 |
| Two iron dampers, - | 1 25 | 2 50 7 " " green-house, - | - 6 00 | 42 00 |
| 960 ft. timber for vinery, - | 4 | 38 40 4 " " " - | - 8 00 | 32 00 |
| 640 " " " green-house, - | 4 | 25 60 3 inside columns, " - | - 1 75 | 5 25 |
| 676 " " " potting-room, - | 62 | 13 52 2 columns to entrance porch, - | - 3 50 | 7 00 |
| 133 " gutter and cornice, - | 18 | 23 94 Painting, - | - | 65 00 |
| 176 " shelving, green-house, - | 6 | 10 56 | | |
| 30 " joist, - | 18 | 5 40 | | |
| 591 " shingling, - | 8 1/2 | 50 23 | | \$1179 68 |

DESCRIPTION OF THE PLATES.

PLATE 55.—Ground plans of the divisions and dimensions of the first and second stories of a stone Villa in the Italian style, Design LI.

PLATE 56.—Geometrical elevations of the lawn and entrance fronts of Design LI.

PLATE 57.—Longitudinal section of A, B, on the first and second stories, and basement plan of Design LI.

PLATE 58.—Details of Design LI; Fig. 1 and 2, sections of gable cornice, brackets, and quoin stones, and cross section of gutter, mouldings, copper linings, rafters, sheathing, and slating; Fig. 3, sections of iron column for the veranda and cornice; A, side and face of brackets; B, stone plinth and base of columns; C, face and profile of the iron truss; Fig. 4, section of the base, shaft and cap of chimney; Fig. 5, sections of the hall column, entablature and cornice; D, plinth and base; E, isometrical section of cornice; Fig. 6, section of the principal stairs, representing the newel, light-stand, string, steps, brackets, balusters, and rail; Fig. 7, elevation of a door for the first story; F, ground plan of architrave and jamb; G, plan of architrave for the second story; Fig. 8, base for the first story; and Fig. 9, base for the second story.

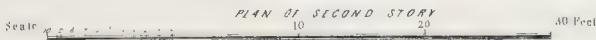
PLATE 59.—Details. Section, and ground plans of the first and second stories and cellar of Design LII.—(and with the addition of a veranda on the sides, the ground plans for Design LIII.) Figs. 1, 2, 3, and 4, sections of the main cornice, and also showing the joist, framing beams, plates, brick filling, cap mouldings, brackets, gutter, rafter, sheathing and shingling; Fig. 5, section of hall pillar and brackets; Fig. 6, section of stair rail, balusters, steps, string and risers; Fig. 7, section of hall window balcony; Fig. 8, section of the end window balcony; Fig. 9, section of the cornice, floor, drapery, bracket, and pillar cap of the side veranda; Fig. 10, section of cupola finial; Fig. 11, section of stair newel and cap.

PLATE 60.—Perspective views of two cottage-villas; one in the Anglo-Swiss style, Design LIII. and the other, Design LIII., in the earliest English style.

The erection of Design LII. will require more skill in the workmanship than most of the other styles of building—all the outside framing timber to be 4 by 8, well seasoned, and framed together with close joints, and all planed outside of the brick work,—all the upright timbers grooved $\frac{1}{2}$ in. deep, and the width of the bricks, and bevelled outside $\frac{1}{2}$ by 2 inches—the framing beams cross-braced and panelled on the face of the brick work—the bricks of a very smooth, hard quality, laid in hydraulic cement and screened sharp sand; the wood work painted two coats of lead and oil, shaded a dark brown and sanded; the brick work painted in the same manner, two shades lighter; the roof covered with 30 inch cedar shingles, on tongued and grooved plank; the outside walls furced on the inside for lathing and plastering; floor timbers, floors, doors, windows, base, &c., to be made in the usual manner—inside patent rolling blinds to all the windows—double thickness English sheet glass in all the sashes; thickness of sashes, $1\frac{1}{4}$ inches for the house and $1\frac{1}{2}$ for the green-house.

The plain details of Design LIII. will require less skill and workmanship than the preceding one; the frame may be of hemlock, spruce or pine, framed and braced in the usual manner; the sides covered with narrow tongued and grooved boards, planed, and the joints beaded and put on with white lead, the corners enclosed by the $\frac{1}{2}$ section of a 2 in. bead, the window-frame jambs rebated and beaded to receive the boards; main roof covered with 30 inch cypress shingles on oak laths; the drapery of 2 inch plank, and the pendants 4 inches square.

Veranda and green-house roofs covered with clear white pine boards, planed and beaded on the underside, and overlaid with lead plate tin, painted both sides, before laying, and the joints soldered; all the sashes in the first and second stories $1\frac{1}{2}$ inches thick, set diagonally with double thickness French glass.





STONE VILLA.

in the Italian and Campesano Style

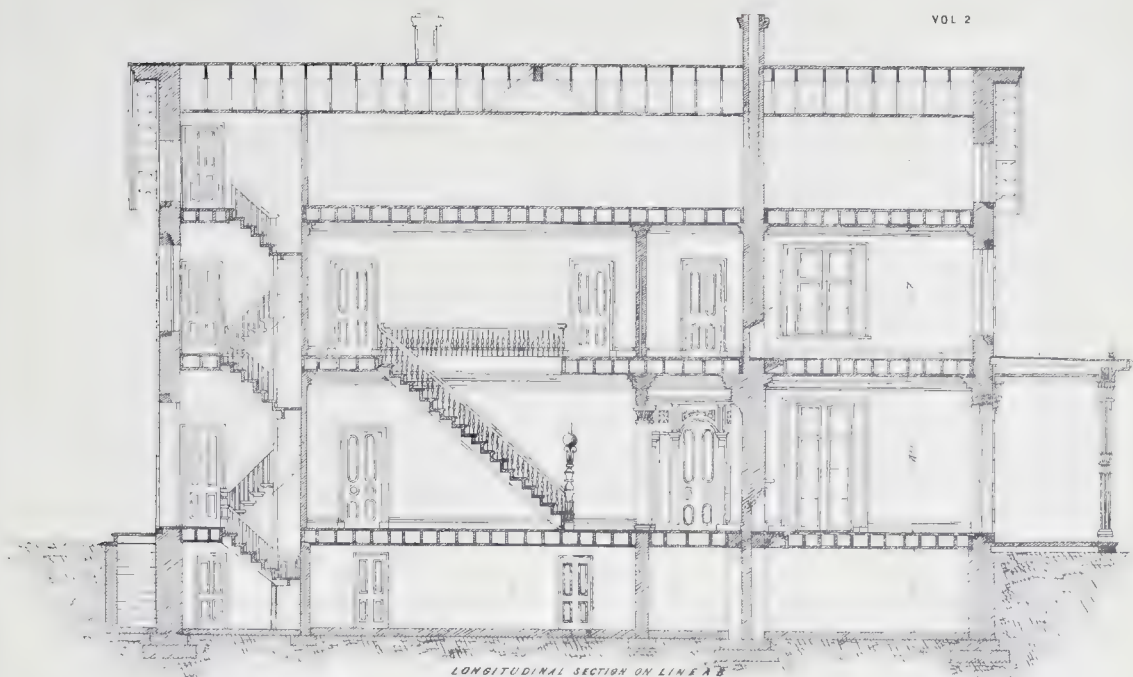
RIVER FRONT



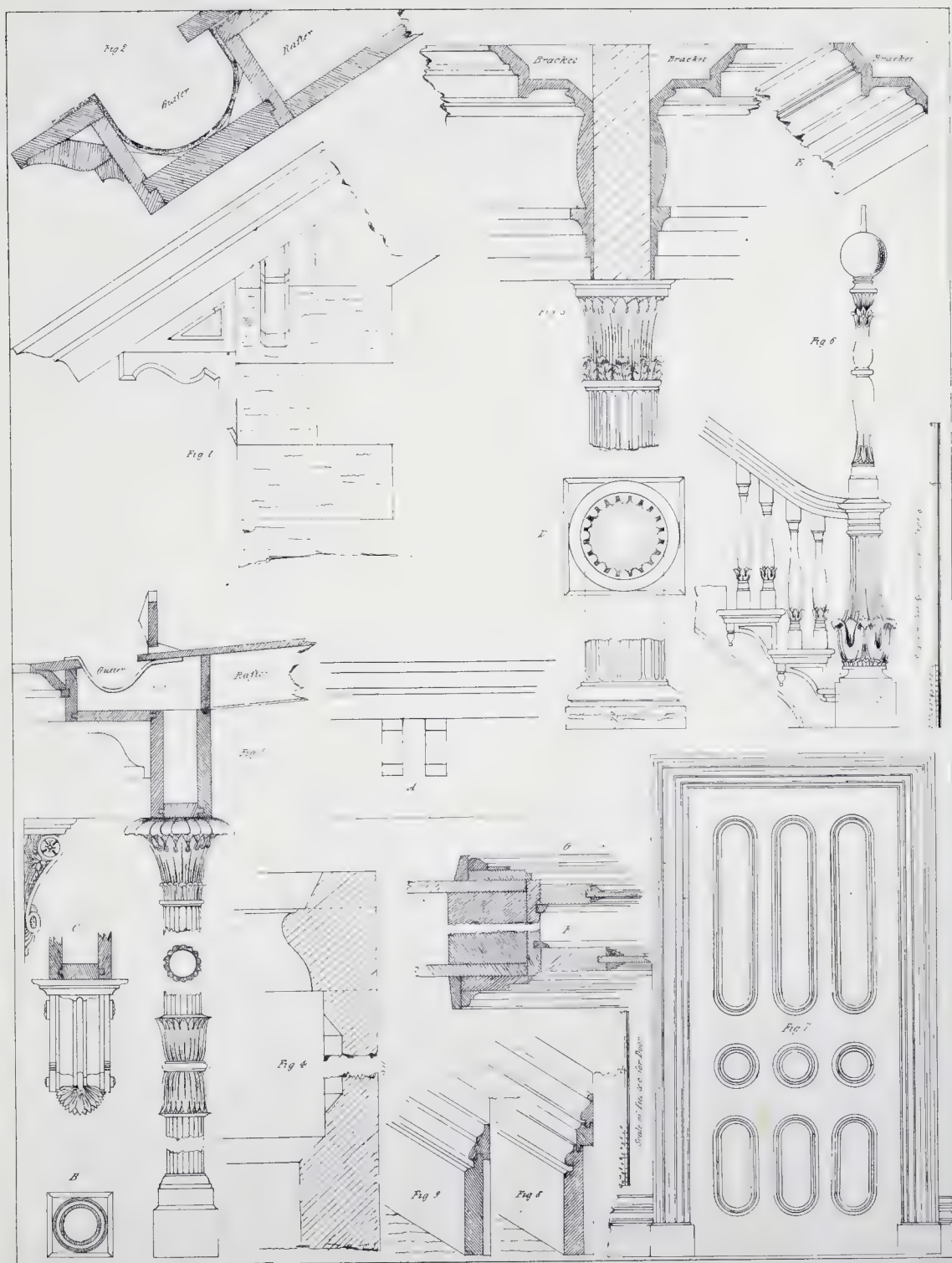
Designed & Del by W. H. Ranlet

ENTRANCE ELEVATION.

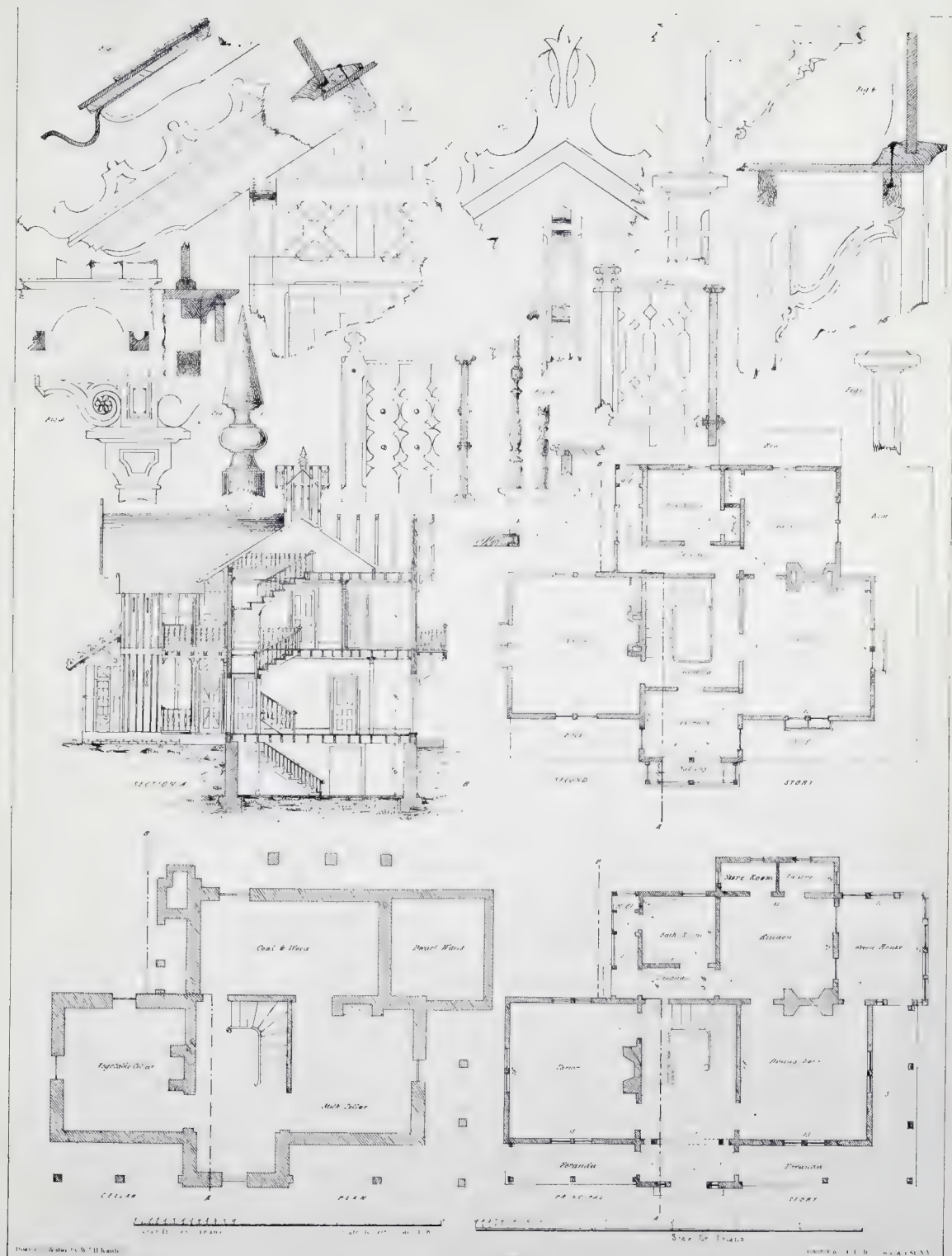
Mayer & Krell, Lith. 95 William St. N.Y.



PLAN OF BASEMENT.



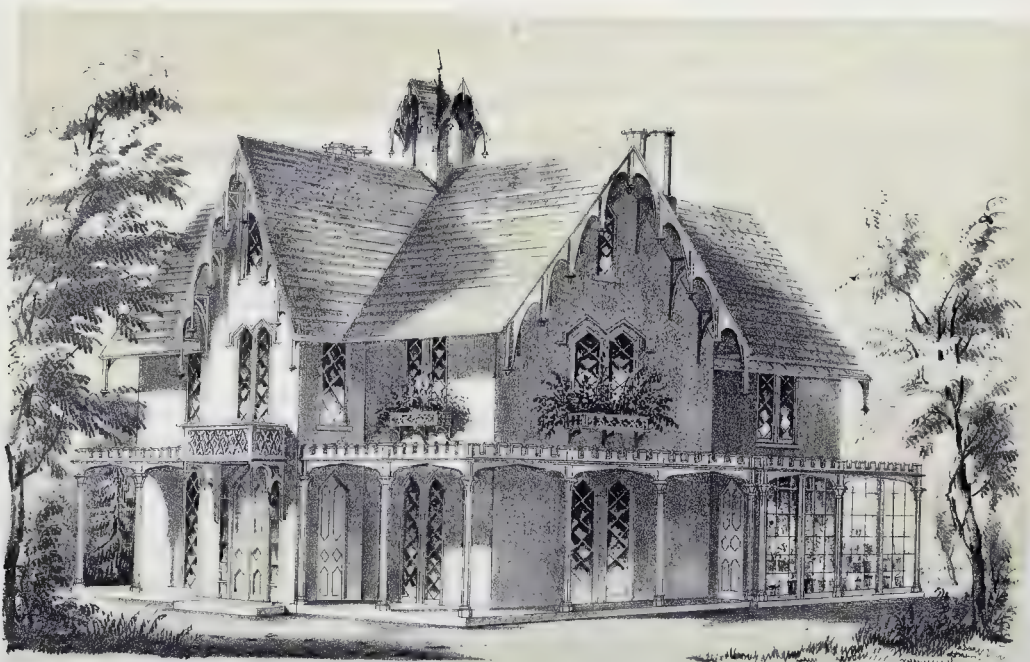
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COTTAGE VILLA.
in the Anglo Swiss Style

DESIGN. LIII.



Designed & built by Wm. and Arthur

COTTAGE VILLA
in the West English Style

Wm. & Arthur, 11, Pall Mall, London, W.

SPECIFICATION

Of the Materials and Labor required in the Erection of Design LI.

EXCAVATIONS To be made for the cellar and aires 6 ft. deep, and the earth graded to 8 inches below the water-table.

COMMON STONE WORK. All the outside walls of the basement to be built up with good quarry stone, laid in hydraulic lime and sand, 24 inches thick and 7 ft. 6 in. high, on a foundation 2 ft. 6 in. wide and 6 in. high.....the aise walls 18 in. thick, and sunk 18 in. below the paving. Walls of coal slide 16 in. thick.....foundations of large flat stones, laid in mortar, under the chimneys, partitions and furnace.....a concrete of stone chips and mortar 8 in. deep under the veranda flagging.

SUPERSTRUCTURE WALLS......18 in. thick, laid up with quarry rubble stones, in Thomaston lime and sand mortar, the joints close and square, and pointed with cement and lime mortar.

CUT STONE WORK. The outside corners laid up with quoin stones, 12 in. thick, 24 in. long, and one-fifth of them 10 in. high, one 9 1-2, one 9, one 8 1-2, and one 8 inches.....the beds and face hammer-dressed. Water-table 8 in. high and 8 in. thick, the wash cut 3-4 in. deep by 4 in. wide.....sills for the outside doors 20 inches wide, and to be a part of the water-table, the wash cut 18 inches wide.....all the window-sills 5 in. thick and 8 in. wide; window lintels 8 inches thick, 11 inches high, in first story, and 9 inches in second story; door lintels 10 inches thick and 12 inches high.....all the sills and lintels to be neatly cut on all the faces, and the beds hammer-dressed.

BLUE STONE......Sills to the basement windows and doors.....steps 10 inches wide, 4 inches thick, and 3 feet 6 inches long; 10 inch coping to all the aires; hearths to kitchen 8 feet long, 3 feet 6 inches wide, and to laundry 6 feet long and 3 feet wide, the tops hammer dressed.....the entrance air and the bottom and top of coal slide laid and covered with common flagging.....veranda to have two courses of dressed flag stones, laid on the foundation with close, square joints.....the outside edge 3 inches thick, on a curb sunk 2 feet below the surface.....plinth 8 inches square, to receive the iron columns, the tops leveled.

BRICK WORK......All the divisions in the basement to be made of hard brick, walls 8 inches.....the two closets from the kitchen to be arched with brick; the furnace (Walter's) to be set in brick work; the inside of all the windows and door heads to have 8 in. brick arches, 12 in. thick; three chimneys with eight fire places, each chimney to have four flues, plastered and copped out 7 feet 6 in. above the roof.

PLASTERING......All the rooms and halls in the first and second stories lathed and plastered two coats of brown mortar, and hard finished with R. P. lime and marble dust; the partitions and gables in the attic, and closets in first and second stories lathed and plastered one coat of brown mortar and hard finished.....all the outside walls, and the ceiling of the basement to be lathed, and, with the brick walls, plastered one heavy coat of brown mortar, slipped, and whitewashed two coats. Plaster cornices in all the principal rooms.

and halls in first and second story.....in the first story the same as on Plate 58, Fig. 5, E.and in the second story 10 inch projection, 5 inches high.

IRON WORK......Cast iron columns and trusses for the veranda, made the same as on Plate 58, Fig. 3, B, C. . iron anchors secured to the beams, and built in the walls: a sheet iron door and frame to one of the closets in the kitchena plain 24 inch grate set in the laundry; ornamental grates in the drawing room, parlor, and dining-room. \$50 range set in kitchen.

TIMBER.....Of sound seasoned sawed pine; the first and second tiers of beams 3 by 11; third tier 3 by 9 all set 16 inches between centers, timbers 2 inches thick; joists 1 by 12, rafters 3 by 9; 2 feet between centers, collar beams 2 by 8, dovetailed into the rafters, the collar beams and rafters to be planed smooth for paintingbasement sleepers of red cedar, 6 inches thick, set 2 feet between centersfirst and second story beams over the principal rooms in first story and basement to be cross bridgedrafters and purlins to the veranda roof, of clear seasoned white pine, 4 by 8 for the rafters, and 3 by 8 for the purlins, all to be planed and beaded, and put together in the neatest manner partitions set with 3 by 4 joists, 12 inches between centers, and bridged in the middledoor studs 4 by 62 by 4 wall strips, built in the walls, not over 4 feet apart, to receive the furringall the walls of stone to be furred for lathing, with 1-4 by 2 in. spruce or hemlock strips, 16 inches between centers, strongly secured with 12d. nailsthe ceilings to be tight furred with strips 1 in. by 2 in., 12 in. between centers, the first and second floors to be deafened with common boards, laid on 1 in. ledges, secured to the beams.

ROOFS......The principal roof to be sheathed with tongued and grooved plank, planed and beaded on the under side, strongly nailed, and overlaid with 1st quality 10 by 16 in. American slate, from the Bangor quarries, Vt., the valleys lined with 16 in. sheet lead, weighing 3 1/2 lbs. to the square foot, the gutters of 18 oz. copperthe brackets, gutter and gable mouldings to be as drawn on Plate 58, Figs. 1 & 2veranda roofs covered with narrow clear white pine plank, planed and beaded on the underside, and overlaid with 1-4 by 20 in. best beaded tin, put on with flat soldered joints, the gutter of 16 oz. copper the fasciae, plinthe and blocking course the same as drawn on Plate 58, Fig. 3.

FLOORS.....All to be laid with white pine milled plank, put down in the best manner, and secured by 12d. nails in the first and second stories to be clear of shakes, worm holes, black sap or knots.

WINDOWS.....In the cellar 6 windows, 16 lights each; 8 by 12 sashes, 1-4 thick hung in mullion frames with weights and cord5 windows in principal story, 8 lights each, 16 by 20, and 6 windows 6 lights each, 1-4 by 22, sashes 1 3/4 thick, hung to mullion frames by 4 inch P. hinges, and secured by French grip boltsthe sash stiles 3 inches wide, and the heads each two lights, to be stationary;in the second story two windows, each 8 lights, 1-4 by 16; one window, 6 lights, 1-4 by 20, the sashes to fold with a ruled joint, hung by 3 1/2 in. P. hinges, and secured by French grip bolts7 windows, 6 lights each, 1-4 by 20and 5 windows, 6 lights, 16 by 20, hung by 3 in. P. hinges, and secured by French latches to mullion framessashes 1 3/4 thick, stiles three inches wide.

the heads stationary. in the attic 4 circular head double windows, 6 lights each, 12 by 14 sashes, 1 1-2 thick, and hung by 3 by 3 butts, and secured by 1-2 inch bolts.....French glass in all the sashes, double thickness in the first and second stories.

SHUTTERS 4 fold, 1 1-2 inch paneled, made and hung by 2 1-2 butts, and 1 1-2 inch welded flaps to all the windows in first and second stories, and secured by 10 inch shutter bars, the folds to be, cut on the transom rail of the sash.....basement windows to have outside panel shutters, hung by welded straps and plates, and secured by bolts. Venetian rolling blinds, moulded both sides, made and hung to all the windows above the basement, by heavy welded strap hinges and plates, and secured by best patent fastenings.

DOORS.....The front and two hall doors to have head and side lights, set with French plate glass... 3 side and back doors, with head lights.....10 passage doors, 3 ft. 4 by 8 ft. 6 in. high, and 5 doors, 3 ft. by 8 ft. 6 in. front door, 2 1-2 thick.....hall and back doors, 2 inches thick.....passage doors, 1 3-4 thick, 4 panels outside and 9 panels inside, moulded with circular heads and bottoms.....in second story, 1 pair sliding doors, 6 ft. by 8 ft. 2 in. thick.....14 doors, 3 ft. by 7 ft. 6 in., 1 1-2 in. thick, and 6 doors, 2 feet 2 in. wide by 7 ft. 6 in. high, 1 1-2 thick, all 4 panels, each moulded with similar ends. all the doors in the house to be 1 1-4 thick, 4 panels, moulded on one side, hung by 3 by 3 butts, and secured by 5 inch mortice locks and mineral knobs. Principal story doors hung by 4 by 4 butts and secured by 4 1-2 in. mortice locks, American porcelain knobs, "blue star" pattern.....Front door to have upright mortice locks with night keys.....Doors in second story hung by 3 1-2 by 3 1-2 butts, and secured by 1-2 inch mortice locks and white porcelain furniture.....Sliding doors set with 6 in. shelves, rolled wings, mortice locks, and double furniture.....Iron flush bolts to all the outside doors.....all the architraves, casings, base, style of the doors, and the hall columns, to be the same as drawn on Plate 58, Figs. 5, 7, 9, and 10.....panel bucks, elbows and soffits to all the windows in first and second stories.

STAIRS.....From the basement to the attic, 2 ft. 6 in. wide, with winders, moulded steps, 2 in. round rail, 1 1-4 balusters, and 1-2 inch newels.....the principal stairs, from first to second story, to have right and left hand rails, 5 by 2 1-2 inches, moulded.....2 1-2 turned balusters, and two 1 1-2 inch turned and curved newels.....the upper section to receive an astral or solar lamp for lighting the hall. See Plate 58, Fig. 6.

CLOSETS AND PRESSES... All to be fitted up with neat beaded shelves, black and brass coat and hat hooks, drawers, &c., complete.

MANTLES... Of m. W in all the rooms of the first story, to cost \$120; omit non mantles in the second story, with blue stone hearths and marble facings. hearth borders to all the fireplaces.

PAINTING.....The blinds to be painted 3 coats of French green; the mahogany rails, &c., to be varnished 6 coats, rubbed and polished.....the tin roof and leader, and all the wood work not otherwise specified, except the wood floors, to have extra pure white lead and linseed oil, put on in the most approved manner; the iron columns and trusses to have a coat of red lead paint and three coats of white lead and oil.

TABLE.

| COST OF MATERIALS AND LABOR, FOR 100 CUBIC FEET OF STONE WORK. | | | | COST OF MATERIALS AND LABOR FOR 100 CUBIC FEET OF BRICK WORK. | | | |
|--|-------|--------|---------|---|---|--------|---------|
| 3 loads of stone, 12½ cubic ft. each, | \$ 75 | \$6 00 | | 2000 bricks, | - | \$4 00 | \$8 00 |
| 1½ casks of Thomaston lime, | 1 00 | 1 50 | | 1½ cask of Thomaston lime, | - | 1 00 | 1 50 |
| 4 loads of sand, | - | 31 | 1 24 | 3 loads of sand, | - | 31 | 93 |
| 1½ days' mason's labor, | - | 1 50 | 2 25 | 1½ days' mason's labor, | - | 1 50 | 1 88 |
| 1½ " laborer, | - | 1 00 | 1 50 | 1 " laborer | - | - | 1 00 |
| | | | \$12 49 | | | | \$14 11 |
| \$12 49, or 12½ cts. per cubic foot. | | | | \$14 11, or \$6 41 per thousand. | | | |

TABLE,

SHOWING THE NUMBER OF NAILS TO A POUND, AND ALSO THEIR RESPECTIVE LENGTHS.

| | | | | | |
|-----|---|---|----|----|--|
| 665 | 3 | penny fine nails to a pound, length, each 1 inch. | 64 | 10 | penny coarse nails to a pound, length, each 3 in. h. |
| 468 | 3 | " coarse " " " 1½ " | 80 | 10 | " fine " " " 3 " |
| 308 | 4 | " " " " " 1½ " | 63 | 12 | " " " " " 3½ " |
| 268 | 5 | " " " " " 1½ " | 52 | 12 | " coarse " " " 3½ " |
| 208 | 6 | " " " " " 2 " | 40 | 20 | " " " " " 3½ " |
| 216 | 6 | " fine " " " 2 " | 30 | 30 | " " " " " 4½ " |
| 123 | 8 | " " " " " 2½ " | 13 | 40 | " " " " " 5 " |
| 104 | 8 | " coarse " " " 2½ " | 11 | 5 | " inch spikes. |

TABLE,

SHOWING THE NUMBER OF BOARDS AND NAILS REQUIRED TO A SQUARE OF SIDING. THE STUDDING 16 INCHES BETWEEN CENTERS.

A SQUARE IS 100 SUPERFICIAL FEET.

| | | | |
|-----|--|-----|-------------|
| 12½ | boards 9 inches wide, ¾ of an inch thick, and 8 inches to the weather, require | 125 | 10d. nails. |
| 13½ | " 8½ " " " " 7½ " | " | 135 10d. " |
| 14 | " 8 " " " " 7 " | " | 140 10d. " |
| 15 | " 7½ " " " " 6½ " | " | 150 10d. " |
| 16½ | " 7 " " " " 6 " | " | 165 10d. " |
| 18 | " 6½ " " " " 5½ " | " | 180 8d. " |
| 20 | " 6 " " " " 5 " | " | 200 8d. " |
| 22½ | " 5½ " " " " 4½ " | " | 223 8d. " |
| 25 | " 5 " " " " 4 " | " | 250 6d. " |
| 28½ | " 4½ " " " " 3½ " | " | 285 6d. " |

TABLE,

SHOWING THE NUMBER OF PLANK AND NAILS TO A SQUARE OF FLOORING; THE BEAMS, 16 INCHES BETWEEN CENTERS

| | | | | | | | |
|-----|---------------------------------|-----|-------------|-----|--------------------------------|-----|-------------|
| 10½ | planks, 9½ inches wide, require | 210 | 12d. nails. | 16½ | planks, 6 inches wide, require | 330 | 10d. nails. |
| 11 | " 9 " " " " 200 12d. " | | | 18 | " 5½ " " " " 360 10d. " | | |
| 11½ | " 8½ " " " " 230 12d. " | | | 20 | " 5 " " " " 400 10d. " | | |
| 12½ | " 8 " " " " 250 12d. " | | | 22½ | " 4½ blind nail'd, one edge, | 223 | 10d. " |
| 13½ | " 7½ " " " " 270 12d. " | | | 25 | " 4 " " " " 250 10d. " | | |
| 14 | " 7 " " " " 280 12d. " | | | 28½ | " 3½ " " " " 285 10d. " | | |
| 15 | " 6½ " " " " 300 10d. " | | | 33 | " 3 " " " " 330 10d. " | | |

ESTIMATE

Of the Materials and Labor required for Design LI.

| | | | | |
|---|-------|----------|---|--------------|
| 720 cubic yds. excavation, - | \$ 12 | \$ 86 40 | Planing principal piazza and rafters, - | 20 00 |
| 3965 " ft. basement wall, - | 13 | 515 45 | 1995 ft. common floor, - | 3 1/2 69 82 |
| 7690 " " superstructure wall, - | 15 | 1153 50 | 5274 " clear " - | 5 263 70 |
| 42 quoin stones, 10 inches high, } | | | 145 " piazza cornice, - | 60 87 00 |
| 42 " " 9 1/2 " " } | | | 242 " main " - | 70 169 40 |
| 35 " " 9 " " } | 45 | 85 0 | 112 brackets, main cornice, - | 40 44 80 |
| 35 " " 8 1/2 " " } | | | 36 " piazza, " - | 20 7 20 |
| 35 " " 8 " " } | | | 374 ft. base, 7 1/2 cts.; 526 ft. base, - | 6 59 61 |
| 26 window sills, 114 ft. - | 45 | 51 30 | 6 windows in cellar, complete, - | 6 50 39 00 |
| 27 " lintels, 129 " " - | 40 | 51 60 | 5 " 1st story " - | 24 50 122 50 |
| 3 door " 27 " - | 30 | 7 95 6 | " " " - | 20 00 120 00 |
| 245 ft. water table, - | 70 | 171 50 | 5 " 2d story " - | 18 00 90 00 |
| 3 chimney caps, - | 8 00 | 24 00 | 8 " " " - | 17 00 136 00 |
| 13 stone plinths, - | 1 00 | 13 00 | 2 " " " - | 16 00 32 00 |
| 118 ft. coping, - | 14 | 16 52 5 | " " " - | 8 00 40 00 |
| 1030 ft. dressed flagging, - | 15 | 154 50 | Principal staircase, 20 steps and risers, - | 2 50 50 00 |
| 160 " " for airies, &c., - | 12 | 19 20 | 78 ft. rail and balusters, - | 2 00 156 00 |
| 264 " piazza curbing, - | 8 | 21 12 | 2 newels, - | 16 00 32 00 |
| 4228 bricks for paving, - | 8 00 | 33 82 | Back staircase, 50 steps and risers, - | 1 50 75 00 |
| 11475 " " chimnies, - | 7 50 | 86 06 | 2 composite columns, - | 25 00 50 00 |
| 12712 " " walls, &c., - | 8 00 | 101 69 | 4 ante, - | 8 00 32 00 |
| 2063 ft. mortar deafening, - | 2 | 41 26 | 4 Venetian hall doors and trimmings, - | 60 00 240 00 |
| 1806 yds. of plastering, - | 25 | 457 50 | 3 entrance doors, 1st story, - | 12 00 36 00 |
| 30 feet plaster entablature, - | 81 | 21 30 | 8 principal " " - | 15 00 120 00 |
| 374 " plaster cor. 27 cts.; 379 ft. - | 23 | 188 15 | 8 passage " " - | 12 00 96 00 |
| 3 mantles, \$40 00; 4 grates, - | 15 00 | 135 00 | 1 pair sliding doors, 2d story, - | 40 00 |
| 3 set marble facings, and hearths, - | 6 00 | 18 00 | 5 principal " " - | 10 00 50 00 |
| Furnace, \$180; kitchen range, - | 50 00 | 230 00 | 12 passage, " " - | 9 00 108 00 |
| 13 cast iron columns, 12 ft. each—156 ft. - | 1 00 | 156 00 | 3 wood mantles, " - | 6 00 18 00 |
| 4 cast iron trusses, - | 4 00 | 16 00 | 5 pantries shelved complete, - | 10 00 50 00 |
| 100 lbs. iron for anchors, - | 6 | 6 00 | 248 ft. blinds, - | 1 00 248 00 |
| 14266 ft. timber, framed, - | 20 00 | 285 32 | Bath tub, force pump, &c., complete, - | 150 00 |
| 237 joist, - | 18 | 42 66 | 350 lbs. white lead, - | 7 50 26 25 |
| 150 wall strips, - | 10 | 15 00 | 10 galls. raw linseed oil, - | 1 00 10 00 |
| 3243 ft. furring, - | 2 | 64 86 | 7 " boiled " - | 1 12 7 84 |
| 2663 ft. board deafening, - | 2 | 41 26 | 5 " spirits turp., - | 60 3 00 |
| 307 lbs. sheet lead, - | 5 | 15 35 | 20 lbs. putty, - | 4 80 |
| 4356 ft. of roof plank and slating, - | 10 39 | 452 58 | 12 " litharge, - | 6 72 |
| 117 " copper gutter, - | 1 50 | 175 50 | 2 " glue, - | 25 50 |
| 145 " " " - | 1 10 | 159 50 | 30 days' painter's labor, - | 1 75 52 50 |
| 12 squares of tin and planking, - | 9 00 | 108 00 | | |
| 126 ft 4 inch tin leader, - | 15 | 18 90 | | |
| | | | | \$8201 44 |

Design LI. will cost \$8201 44; Design LII. will cost \$4630 00; and Design LIII. will cost \$3380 00.

TABLE,

SHOWING THE CALIBRE, WEIGHT, AVERAGE LENGTH AND COST PER LB. AND FOOT OF PATENT LEAD PIPE FOR
HYDRANTS, PUMPS, &c.

| Calibre. | Weight per foot lbs. oz. | Average length, feet. | Calibre. | Weight per foot, lbs. oz. | Average length, feet. |
|-------------------------------|-----------------------------|--------------------------|--------------------------------------|------------------------------|--------------------------|
| $\frac{1}{2}$ inch light, | 13 $\frac{1}{2}$ | 80 | $1\frac{1}{2}$ inch strong, | 6 5 $\frac{1}{2}$ | 20 |
| " " medium, | 1 1 | 70 | " " extra light, | 3 10 $\frac{1}{2}$ | 30 |
| $\frac{3}{4}$ inch light, | 1 | 75 | " " light, | 4 7 $\frac{1}{2}$ | 25 |
| " " medium, | 1 5 $\frac{1}{2}$ | 60 | " " medium, | 5 5 $\frac{1}{2}$ | 26 |
| " " strong, | 1 10 $\frac{1}{2}$ | 70 | " " strong, | 6 10 $\frac{1}{2}$ | 18 |
| " " extra strong, | 2 2 | 55 | " " light, | 5 9 $\frac{1}{2}$ | 24 |
| 1 " light, | 1 10 $\frac{1}{2}$ | 65 | " " medium, | 6 13 $\frac{1}{2}$ | 16 |
| " " medium, | 2 2 $\frac{1}{2}$ | 60 | " " strong, | 7 16 $\frac{1}{2}$ | 14 |
| " " strong, | 2 7 $\frac{1}{2}$ | 50 | $2\frac{1}{2}$ " 3-16 in. thick, | 7 13 $\frac{1}{2}$ | 28 |
| " " extra strong, | 2 12 | 45 | " " $\frac{1}{4}$ " " " | 11 0 | 25 |
| $1\frac{1}{4}$ " extra light, | 1 10 $\frac{1}{2}$ | 60 | " " 5-16 " " " | 13 10 $\frac{1}{2}$ | 20 |
| " " light, | 2 1 $\frac{1}{2}$ | 47 | " " $\frac{3}{8}$ " " " | 16 10 $\frac{1}{2}$ | 16 |
| " " medium, | 2 16 $\frac{1}{2}$ | 43 | " " 3-16 " " " | 9 5 $\frac{1}{2}$ | 25 |
| " " strong, | 3 4 | 35 | " " $\frac{1}{2}$ " " " | 12 10 $\frac{1}{2}$ | 20 |
| " " extra strong, | 3 8 | 33 | " " 5-16 " " " | 16 0 | 18 |
| $1\frac{1}{2}$ " extra light, | 2 4 $\frac{1}{2}$ | 60 | " " $\frac{3}{4}$ " " " | 19 10 $\frac{1}{2}$ | 13 |
| " " light, | 2 12 | 45 | $3\frac{1}{2}$ " $\frac{1}{4}$ " " " | 15 0 | 18 |
| " " medium, | 3 6 $\frac{1}{2}$ | 35 | " " 5-16 " " " | 18 5 $\frac{1}{2}$ | 14 |
| " " strong, | 4 1 $\frac{1}{2}$ | 30 | " " $\frac{3}{8}$ " " " | 21 16 $\frac{1}{2}$ | 12 |
| $1\frac{3}{4}$ " extra light, | 2 11 $\frac{1}{2}$ | 45 | " " 7-16 " " " | 26 10 | 10 |
| " " light, | 3 4 | 38 | 4 " $\frac{1}{2}$ " " " | 16 5 $\frac{1}{2}$ | 15 |
| " " medium, | 3 10 $\frac{1}{2}$ | 32 | " " 5-16 " " " | 21 0 | 12 |
| " " strong, | 4 2 | 25 | " " $\frac{3}{4}$ " " " | 25 5 $\frac{1}{2}$ | 10 |
| " " extra strong, | 4 16 $\frac{1}{2}$ | 21 | " " 7-16 " " " | 30 0 | 8 |
| $1\frac{1}{2}$ " extra light, | 3 8 | 45 | 4 " waste pipe, | 5 4 $\frac{1}{2}$ | |
| " " light, | 4 5 | 30 | $1\frac{1}{2}$ " " " " | 5 12 | |
| " " medium, | 5 0 | 25 | 5 " " " " | 10 0 | |

TABLE,

SHOWING THE THICKNESS OF SHEET LEAD, ACCORDING TO THE WIRE GAUGE, AND WEIGHT PER SQUARE FOOT.

| No. 1 wire gauge, $3\frac{1}{2}$ thicknesses to an in., 20 lbs. to a sq. ft. | | | | | No. 11 wire gauge, 9 thicknesses to an in., 7 lbs. to a sq. ft. | | | | |
|--|---------------------|----------------------|--------|--------|---|---------------------|---------------------|---------------------|---------------------|
| " 2 " | " 4 " | " 18 " | " 12 " | " 10 " | " 6 " | " 5 $\frac{1}{2}$ " | " 4 $\frac{1}{2}$ " | " 4 " | " 3 $\frac{1}{2}$ " |
| " 3 " | " 4 1-16 " | " 16 $\frac{1}{2}$ " | " 13 " | " 12 " | " 5 $\frac{1}{2}$ " | " 5 " | " 4 " | " 3 $\frac{1}{2}$ " | " 3 " |
| " 4 " | " 4 $\frac{1}{2}$ " | " 15 $\frac{1}{2}$ " | " 14 " | " 13 " | " 5 " | " 4 $\frac{1}{2}$ " | " 4 " | " 3 $\frac{1}{2}$ " | " 3 " |
| " 5 " | " 5 " | " 14 " | " 15 " | " 14 " | " 4 $\frac{1}{2}$ " | " 4 " | " 3 $\frac{1}{2}$ " | " 3 $\frac{1}{2}$ " | " 3 " |
| " 6 " | " 5 $\frac{1}{2}$ " | " 12 $\frac{1}{2}$ " | " 16 " | " 16 " | " 4 " | " 3 $\frac{1}{2}$ " | " 3 $\frac{1}{2}$ " | " 3 $\frac{1}{2}$ " | " 3 " |
| " 7 " | " 5 $\frac{3}{4}$ " | " 11 $\frac{1}{2}$ " | " 17 " | " 18 " | " 3 $\frac{1}{2}$ " | " 3 $\frac{1}{2}$ " | " 3 $\frac{1}{2}$ " | " 3 $\frac{1}{2}$ " | " 3 " |
| " 8 " | " 6 " | " 10 $\frac{1}{2}$ " | " 18 " | " 20 " | " 3 " | " 3 " | " 3 " | " 3 " | " 3 " |
| " 9 " | " 7 " | " 9 " | " 19 " | " 23 " | " 2 $\frac{1}{2}$ " | " 2 $\frac{1}{2}$ " | " 2 $\frac{1}{2}$ " | " 2 $\frac{1}{2}$ " | " 2 $\frac{1}{2}$ " |
| " 10 " | " 8 " | " 8 " | " " | " " | " " | " " | " " | " " | " " |

The cost of lead pipe, and sheet lead, is 5 $\frac{1}{2}$ cts. per lb.

NOTICE.

THE present number of the ARCHITECT completes the Second Volume and brings the work to a close. It was begun with diffidence in the author's ability to furnish an architectural guide in the erection of rural and suburban residences; but as no one better qualified than himself offered to supply a want which was widely felt, he undertook the task; and the evidences of public approval in the sale of the publication, and the commendations of the press, have afforded undisputable evidences of success in the undertaking greatly beyond his most sanguine expectations.

All the designs in the work are original, and were expressly adapted to the social wants of the people of this country, and to the exigencies of our climate. The estimates have all been carefully prepared from practical experience, and have been in no instance under stated. If any errors exist, they will be found on the safe side; so that those who attempt to superintend the building of their own houses, will not find themselves led into unexpected expenditures from following our directions.

The success which has attended the attempt of the author to furnish a purely American work on Villa and Cottage Architecture, has emboldened him to commence one on a similar scale, devoted to street architecture or city residences.

The last ten years have witnessed great improvements in the construction of city houses, both as regards their interior arrangements and external decorations; but much yet remains to be done to render the moderate sized houses, intended for that numerous class of neither-rich-nor-poor who constitute the life and body of the nation, suited to the refined wants of a free and intelligent people.

There can be no doubt that much of the sickness which afflicts families whose habits might be supposed such as would insure them health, are caused by the imperfect manner of heating and ventilating houses; from damp walls and stagnant cesspools. There can be as little doubt that the cost of living might be greatly reduced, while the domestic comforts of families would be greatly increased by bringing to the construction of city houses a thorough knowledge of the principles of heating and ventilating rooms which the scientific discoveries of the age have brought to light.

In the CITY ARCHITECT all the new improvements in the construction of private dwellings which have been made in this country and in Europe will be introduced, a great variety of designs and plans on street architecture will be given, and full tables of details of the cost of materials and labor will accompany each plan, as in the plans of THE ARCHITECT.



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